

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1827.—Vol. XL.

LONDON, SATURDAY, AUGUST 27, 1870.

(WITH SUPPLEMENT) {STAMPED ...SIXPENCE.  
UNSTAMPED...FIVEPENCE.

**MR. JAMES CROFTS, STOCK AND SHAREBROKER,**  
No. 1, FINCH LANE, CORNHILL.  
(ESTABLISHED 1842.)

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

**ROCHE CONSOLS.**—A splendid improvement has taken place at this mine. A new rich tin lode has been cut in the shaft. Mr. CROFTS recommends the immediate purchase of these shares.

Every description of shares BOUGHT and SOLD at NET prices.

Bankers: Metropolitan Bank.

**MR. W. H. BUMPUS, STOCK AND SHAREDEALER,**  
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

50 Anglo-Austral., 15s 9d	50 Frontino, 12s. 9d.	25 Sweetland Ck., £23 3 9
25 Australian Unl., 32s 6	60 Gen. Brazilian, 14s 6d	30 So. Condurrow, £22 1/2
10 Ashcroft, £5 1/2	5 Great Lacey, £18 1/2	60 Taquaril, 18s. 9d. pm.
20 Bradrain Consols.	25 Great North Lacey.	5 Tankerville, £15 1/2
10 Bitch Consols., £3 1/4	25 Great Vor, £28 3s. 9d.	25 Tan-yr-Alit, £21 1s. 3d
20 Bronfloyd, £2 1/2	20 Lovell Con. (offer wd.)	25 Van Consols, £21 11s. 3
20 Caegynon, £1 1/2	10 Marke Valley, £7 1/2	5 Wt. Chiverton, £55 1/2
50 Calbeck Fells, 27s 6d	20 New Lovell.	50 West Maria, 35s. 9d.
40 Carn Camborne, 29s 3d	40 No. Treskerby, 6s. 3d.	30 W. Pant-y-Go, 17s. 6d
75 Chontales, 13s. 9d.	10 Penryn, £1 18s. 9d.	20 W. Tankerville, £29 1/2
15 Don Pedro, £2 pm.	20 Pacific, £2 18s. 9d.	25 West Caradon, 28s.
50 Drake Walls, 25s. 9d.	50 Prince of Wales.	40 Wb. Crebhor, 15s. 9d.
2 Devon Consols., £21.	15 Plynlimmon, £2 6s 3d	10 Wheel Grenville.
15 East Caradon, £4 8s 9	50 Perkins Beach (offer wd.)	20 Wt. Drake Walls, 6s 3
5 East Lovell, £3 1/2	50 Pen'Alit, 32s. 6d.	15 Wheel Agar.
15 Frank Mills, £2 15s.		70 Yudanmutana, 11s 3

W. H. B. transacts business in every description of shares at the best market prices, and free of commission.

Daily Price-List free on application.

Bankers: The Metropolitan Bank (Limited), Cornhill, E.C.

**JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER,**  
44, THREADNEEDLE STREET, LONDON, E.C.  
J. R. is a BUYER of Wheal Grenville, East Grenville, Wheal Crebhor, at 10s., and West Caradon shares.

Bankers: London and Westminster, Lothbury.

**MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,**  
11, ROYAL EXCHANGE, E.C.  
Bankers: Bank of England.

**MR. T. A. MUNDY, STOCK AND SHAREDEALER,**  
35, BISHOPSGATE STREET WITHIN, E.C.  
Bankers: City Bank.

**MR. JOHN MOSS, STOCK AND SHAREDEALER,**  
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.  
Bankers: City Bank, Finch-lane, E.C.

**MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER,**  
No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.  
SPECIAL BUSINESS in Taquaril, Pacific, Sweetland Creek, and Frontino shares.

Bankers: City Bank, Finch-lane.

**MESSRS. A. STUART AND CO., 93, BISHOPSGATE STREET WITHIN, LONDON, E.C.**

Established upwards of Twenty Years in Cornwall and London.

**MR. J. R. PIKE, STOCK AND SHAREDEALER,**  
3, CROWN CHAMBERS, THREADNEEDLE STREET.

**MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER,**  
19, THROGMORTON STREET, LONDON, E.C.  
Every description of shares BOUGHT and SOLD at the best market prices.

**MESSRS. J. HUME AND CO., STOCK AND SHARE BROKERS,**  
74, OLD BROAD STREET, LONDON, E.C., have FOR SALE:—

10 East Lovell.	5 Tincroft.	50 Crebhor.
10 Tankerville, £15 1/2.	20 Van Consols, £2 1/2.	20 Grenville.
50 W. Tankerville, £21 1/2	20 New Lovell, 35s.	10 Marke Valley.
1 Seton.	50 W. Taquaril.	50 West Maria.

SPECIAL BUSINESS in Seton, Agar, East Lovell, and Taquaril.

Bankers: The London Joint-Stock Bank.

**MR. W. TREGILLAS, 122, BISHOPSGATE STREET WITHIN, E.C., DEALS** in all descriptions of STOCKS and SHARES.

W. T. having first introduced the TAQUARIL GOLD MINING COMPANY, congratulates his friends who upon his advice hold shares. The accounts by the half this week show unmistakably that, even if no further discoveries are made, Taquaril will be the richest mine in Brazil. W. T., being long resident in Brazil, knows the property well, and he has no hesitation in saying that in little time enormous profits will be realised, whilst further important discoveries are certain. W. T. is prepared to do business in the shares to any extent.

**ENDIAN AND CO., STOCK AND SHAREDEALERS,**  
BRITISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES,  
85, GRACECHURCH STREET, LONDON, E.C.

We specially invite the attention of investors and capitalists to the GEORGIN MINING COMPANY, advertised in this Journal to-day. The property is a bona fide one, having the Van lode running entirely through it, with levels driven, the lode cut, and raising ore worth £18 to £20 per ton, a further improvement being daily expected; and it is likely to be the great centre of attraction in the Van district. From the numerous applications for shares from all parts of the country, it will be a great success. Every investor desirous of making money should apply for shares. A prospectus, plans, and forms of application can be had at this office.

**ABERDAUNANT.**—We strongly advise their purchase.

**TERRAS TIN.**—In the course of next week Mr. ENDIAN will accompany several gentlemen from London to the mine, and on his return will be glad to supply information touching the property.

All kinds of marketable stock dealt in for cash or account.

**MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 16 years),** has FOR SALE the FOLLOWING SHARES, at net prices:—

20 Australian Unl., 31s.	50 Florence and Tonkin United.	5 St. John del Rey, £12 1/2
20 Anglo-Argent., 16s.	20 Great Western, 36s.	30 Sweetland Ck., £23 1/2
10 Ashcroft, £5 1/2	50 Gt. So. Toigus, 8s. 6d.	20 So. Darren, 28s.
20 Bradrain Consols., 30s.	100 General Brazilian, 7s. 1/2	2 So. Condurrow, £21 1/2
20 Caegynon, 26s. 9d.	dis.	2 So. Frances, £32 1/2
10 Chontales, 13s. 9d.	5 Great Vor, £28.	50 Tankerville, £15 1/2
20 Cefn Consols.	5 Marke Valley, £28 1/2	50 Taquaril, 18s. 9d. pm.
10 Chiverton Moor, £23 1/4	20 New Lovell, 35s. 9d.	25 Van Consols, £21 11s. 3
10 Cardigan Bay.	50 New Central Snail-beach, 23s. 9d.	2 Van, £23.
50 Drake Walls, 25s.	30 No. Crofty, 47s. 6d.	2 W. Chiverton, £55 1/2
1 Dolocath, £12 1/2	25 Penryn, 33s.	1 Wheel Seton, £45 1/2
20 Don Pedro, 30s. 5d.	20 Plynlimmon, 45s.	2 West Frances, £27.
5 East Seton, 20s. 5d.	1 Providence, £29 1/2.	20 W. Tankerville, £21 1/2
5 East Lovell, £3 1/2	20 Pacific, 48s. 9d.	20 Wheel Agar, 48s.
5 Eberhard, £2 1/2 pm.	20 Pen'Alit, 33s.	1 Wheel Basset, £29 1/2
10 E. Caradon, £4 6s. 3d	50 Prince of Wales, £2 1/2	20 West Maria, 35s.
20 Frank Mills, £2 15s.	100 Port Phillip, 12s. 9d.	5 Wb. Mary Ann, £9 6 3
20 Frontino, 12s. 9d.	50 Gorsead, 50 Drake Walls, 6s 3	1 West Seton, £120.

And is a BUYER of—50 Gorsead, 50 Drake Walls, 50 Spear Moor, 2 Providence, 100 Pen'Alit, and 20 South Merilyn shares, at market quotations.

**MR. GEORGE BUDGE, STOCK AND SHAREDEALER,**  
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 31 years), is a SELLER at net prices of:—

Lisburne, 2 Minera, 3 South Darren, 15 Marke Valley, 5 West Chiverton, Polbreon, 50 Van Consols, 5 Van, 32 Trevarrack, 10 Wheel Kitty (St. Agnes), Crebhor, 25 New Pembroke, 60 Plynlimmon, 50 New Wheel Charlotte, 30 Bitch Consols, 100 Wheel Ida, 5 Tankerville, 100 Nanteos Consols, 50 East New Wheel Crebhor, 4 Seton, 1 Dolocath, 100 Redmoor, 100 Gwydyr Park, 90 West Drake Walls, 40 Wheel Agar, 100 Taquaril, 150 Anglo-Brazilian, 200 Rossa Grande, 50 Anglo-Australian.

Mr. BUDGE advises investors to secure an interest in Bradrain Consols. He says that he does not know another mine making equal returns, and giving open shares, or so favourably situated, the shares of which are selling at anything like the price. There were sold on the 23d inst. 30 tons of ore.

**TANKERVILLE, WEST TANKERVILLE, AND WELSH LEAD MINES.**

**EAST WHEAL LOVELL, AND OTHER CORNISH MINES.**

**PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES,"** &c., of Friday, Aug. 26, No. 597, price 6d. each copy, forwarded on application, contains information on the following mines:—

Tankerville.	West Seton.	West Great Work.
West Tankerville.	Minera.	East Seton.
North Crofty.	Great Western.	Trumpet Consols.
West Caradon.	East Lovell.	

With Remarks on the Metal Markets, &c.

**MR. PETER WATSON, STOCK AND SHAREDEALER,**  
79, OLD BROAD STREET, LONDON, E.C.  
Bankers: The Alliance Bank, and Union Bank of London.

**MR. EDWARD COOKE, STOCK AND MINING SHAREDEALER,**  
76, OLD BROAD STREET, LONDON, E.C.  
Bankers: Alliance Bank.

**MR. W. H. CUELL,**  
No. 42, CORNHILL, LONDON, E.C.  
Daily price-list on application.

**MR. WILLIAM MICHELL, 42, CORNHILL, LONDON, E.C.**  
Dealer in British Mines, Stocks, Shares, &c.

Twenty-six Years' Experience.

**MR. F. W. MANSELL, STOCK AND SHAREDEALER,**  
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C., having been connected with the Mining Market for the above period, and constantly visiting the mines of Cornwall and Wales, is at all times in a position to give reliable advice in the purchase and sale of shares.

Mr. MANSELL is instructed to advance £2000 upon mining shares, at 6 per cent. Applications personal, or by letter as above.

Daily List of closing prices in British and Foreign mines published every evening, and forwarded to correspondents (free).

References exchanged.

Bankers: London Joint-Stock Bank.

**MR. THOMAS THOMPSON, STOCK AND SHAREDEALER, AND MINE AGENT,**  
12, OLD JEWRY CHAMBERS, LONDON, E.C.

Mr. THOMPSON recommends the purchase of NEW CENTRAL SNAILBEACH shares, as this mine will become the most valuable property in the district; also of LLANDILOES WHEAL VAN.

Free on application a few remarks on "Mining in the Llanidloes (Van) district," also on "The Science of Investments."

**MR. THOMAS ROSEWARNE, SHAREDEALER,**  
81, OLD BROAD STREET, LONDON, E.C.  
Orders by letter or telegram punctually attended to at closest market prices.

Office hours Ten to Four o'clock.

Money advanced to any extent on good mining shares.

Bankers: Bank of England.

**SILK AND CO., STOCK AND SHARE BROKERS.**  
CHIEF OFFICES: 32, REGENT STREET, W.  
CITY OFFICES: 36, MARK LANE, E.C.

BUSINESS of every description in Stocks and Shares negotiated at the best market rates for cash only.

FRANK LIMMER, Secretary.

**INVESTMENTS IN LEAD MINES.**—The DIVIDENDS paid by LEAD MINES for the year have DOUBLED IN AMOUNT in the last ten years, and are likely to continue to increase. Some of the young lead mines will probably become profitable, and rise greatly in value in a short time. Full particulars, with a MAP of the Cardiganshire and Montgomeryshire districts (including Van, Dyliffe, Plynlimmon, East Darren, South Darren, Lisburne, Cwmystwith, Cefn Brwyno, and other mines), can be obtained on application to J. H. MURCHISON, Esq., No. 8, Austinfriars, London, E.C.

**MESSRS. W. DUNN AND CO., STOCK AND SHARE-DEALERS,**  
3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.  
Bankers and Reference: National Provincial Bank of England.

**FOR SALE, at prices affixed:—**

50 Aberdaunant, offer	50 Guerrero Gold, fully wanted.	100 Terras, £1 10s.
20 Bronfloyd, £2 2s. 6d.	10 Great Rock, offer wtd	50 Van Consols, £2 8s 9d
20 Brynpyg, 18s.	50 Holmbush and Kelly	20 West Caradon, 17s 6d
10 Bradrain, £1 9s.	Bray, 6s. 3d.	2 Wt. Chiverton, £55 1/2
50 Calbeck Fells, £1 7s.	10 North Crofty, £2 8s.	20 Wt. Maria, £1 13s 9d
5 Cook's Kitch., £16 12 6	50 North Treskerby, 5s.	30 Wt. Pant-y-Go, 13s 9
50 Drake Walls, £1 5s.	10 Pacific, £2 17s.	20 Wt. Tankerville, £2 12 6
5 East Lovell, £32 10s.	50 Pen'Alit, £1 11s. 3d.	10 Wheel Agar, £2 7s 6d
20 East Seton, £1 1s.	20 South Darren, £1 8s.	5 W. Mary Ann, £9 3s 9
100 Excelsior, offer wtd.	40 South Merilyn, offer	1 Wheel Seton, £47.
5 Great Vor, £2 17s.	wanted.	

**SPECIAL.**—W. D. and Co. do not desire it to be inferred that "offer wanted" implies that such shares to which it refers are unsaleable, but that tenders even below quotations might be accepted in the absence of the usual demand in the ordinary market.

**MR. HENRY MANSELL, STOCK AND SHAREDEALER,**  
1, PINNER'S COURT, OLD BROAD STREET, LONDON, has FOR SALE, at net prices, for cash, the FOLLOWING SHARES:—

50 Aberdaunant, offer	20 Llanarmon.	100 Harewood Cons., offer
wanted.	50 South Merilyn.	wanted.
20 South Condurrow.	120 Bryn Royaltan Con-	50 West Esgrail Lie.
100 Excelsior, offer wtd.	soils, 12s. 6d.	25 Hammett, offer wtd.
30 West Pant-y-Go, 20s.	20 Terras, 21s.	100 Lovell Consols.
50 Princesses of Wales, 8s.	25 West Jewell.	20 Cefn Consols.

Mr. HENRY MANSELL should be consulted by intending investors in mining shares. The present low prices of legitimate properties offer inducements in favour of the purchasers that ought not to be lost sight of.

**TERRAS TIN MINE.**—Mr. HENRY MANSELL intends inspecting this property on Tuesday next, and will be happy to afford every information to his clients and others as to the prospects, &c., of the same.

Bankers: London Joint-Stock Bank.

**FOR SALE (or part), for IMMEDIATE DELIVERY, free of commission, and at market prices:—**

25 Agar.	25 Killy (St. Agnes).	15 Tankerville.
5 Buller.	5 Mary Ann.	2 West Seton.
75 Don Pedro.	20 Penhalls.	5 Wheel Margaret.
35 Frank Mills.	100 Pacific Gold.	100 Nanteos Con., 12s. 6d
15 Great Vor.	100 Taquaril Gold.	100 South Van, 10s.

An early application is desirable to Messrs. BISHOP and CO., Sharedealers, 32, Nicholas-lane, Lombard-street, London.

**PUBLIC BOND.**—There is no dividend mine worth ten years purchase, and intending investors will do well to act upon disinterested advice. SHARES ON SALE, paying over 15 per cent., also SHARES in SOUND PROGRESSIVE MINES, in each case strongly recommended.

H. B. RYE.

77, Old Broad-street, London, August 26.

**BARTLETT AND CHAPMAN, STOCK AND SHARE DEALERS,**  
36, CORNHILL, LONDON, E.C.

The INVESTMENT CIRCULAR, published on the first Wednesday in each month. Subscription, 5s. a year, including postage; a single copy, 6d.

The HANDY-BOOK FOR INVESTORS, comprising a sketch of the Rise, Progress, and Present Character of every species of Investment, British, Colonial, and Foreign; including an estimate of their comparative safety and profit. Bound in cloth, 10s. 6d.

BRITISH MINES AND MINING, comprising a comparison of Mining with other Investments; a description of the Mining Districts of the United Kingdom, and a detailed account of the Tin, Copper, Lead, and other Mines in Cornwall, Devon, Salop, Wales, and the Isle of Man; with a complete Glossary of Mining Terms. Bound in cloth, 2s. 6d.

MONTHLY LIST OF BRITISH AND COLONIAL INVESTMENTS, showing the rate of interest returned in marketable stocks and shares, for the guidance of investors. 1s., post free.

Cheques to be crossed London and Westminster or Alliance Bank

**MR. CHARLES THOMAS,**  
MINING AGENT, AND GENERAL SHAREDEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. JOHN GIBBS, STOCK AND SHAREDEALER,**  
51, THREADNEEDLE STREET, LONDON, E.C.  
All kinds of shares bought and sold at closest market prices.

Bankers: London and County Bank.

**MR. T. E. W. THOMAS, STOCK AND SHAREDEALER,**  
3, GREAT WINCHESTER STREET BUILDINGS, E.C.  
Business operations in Mining Shares effected at close market rates.

**EUROPEAN WAR—PRESENT CRISIS.**—See a SHORT STATEMENT in a SPECIAL CIRCULAR, issued GRATIS on application, by—

JOHN B. REYNOLDS, 70 and 71, Bishopsgate-street Within, London, E.C.

**MR. E. J. BARTLETT, STOCK AND SHAREDEALER,**  
No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

Sixth edition of "How to Invest," &c., forwarded for seven stamps.

**MR. H. WADDINGTON, SHAREDEALER, 48, THREADNEEDLE STREET, LONDON.**

SHARES FOR SALE:—30 West Stiperstones, £1 paid (possessing most excellent chances), 10s. 6d. each; 2 New Seton, £30; 100 New Birch Tor and Vitifer; 50 Plynlimmon, £2 1/2; 25 Great South Toigus, 100 East Carn Brea.

**MR. THOMAS SPARGO, STOCK AND SHAREDEALER,**  
224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

LEAD MINES AS AN INVESTMENT.

Now ready, by J. H. MURCHISON, Esq., F.R.G.S.,

FOURTH EDITION OF

**THE "LEAD MINES OF CARDIGANSHIRE AND MONTGOMERYSHIRE,"**—districts comprising VAN, DYLIFFE, LISBURN, EAST DARREN, SOUTH DARREN, CEFN BRWYN, and other important Mines. With a MAP, showing the position of the different Mines, arranged and drawn specially for this Pamphlet.

This edition is revised, with additional remarks, and brought up to the present date. Price 1s.

8, Austinfriars, London, E.C.

New edition, 1870, price 6d.

**SELF HELP TO PATENT LAW;**  
Also, price 1s.,

**COLONIAL AND FOREIGN PATENT LAWS.**

By GEORGE DAVIES, C.E.

Published at the Office for Patents, 4, St. Ann's-square, Manchester, by GEORGE DAVIES, C.E. (late John Davies and Son).

Established 1835.

**MESSRS. G. JAVINGTON AND A. PENNINGTON,**  
44, THREADNEEDLE STREET, E.C., have SPECIAL BUSINESS in the undermentioned:—

Pacific Gold.	Sweetland Creek.	Great Vor.
East Lovell.	Tankerville.	Anglo-Brazilian.
Drake Walls.	Yudanmutana.	Taquaril.
Kitty (St. Agnes).	Australian United.	General Brazilian.

**MR. JAMES BRENCHELY, 32, NICHOLAS LANE, LOMBARD STREET, LONDON.**  
(Established 1844).

Purchases and Sales effected in British and Foreign Mines, Bonds, &c.

HOLDERS DESIROUS OF SELLING in the FOLLOWING are solicited to communicate at once:—

Cook's Kitchen.	North Crofty.	Tincroft.
Dolocath.	Providence.	Wheal Seton.
Drake Walls.	South Frances.	Wheal Uay.
East Lovell.	South Condurrow.	Wheal Jane.

**MR. J. B. HAWKES, STOCK AND SHAREDEALER,**  
3, CROWN COURT, THREADNEEDLE STREET, E.C., has FOR SALE the following SHARES:—

50 Eclipse, 1s. 6d. dis.	50 Rossa Grande, 6s. 6d.	5 Wb. Margaret, £5 7 6
50 So. Australian, 16s.	2 Cook's Kitch., £16 1/2	20 Wb. Grenville, £1 1/2
20 Wb. Crebhor, 13s. 6d.	5 East Pool, £2 1/2	5 Wheel Buller, 5s.
5 Wheel Kitty, £7.	2 Tincroft, £35 1/2	20 Chiverton, 34s.
10 Chiverton Valley, £3 1/4	10 Tan-yr-Alit, £2 16s 3d	50 Yudanmut., 10s. 9d.
5 Great Lacey, £18 1/2	10 Cape Copper, £2 1/2 pm.	1 Devon Gt. Cons., £82.

**NOTICE OF REMOVAL.**

**MR. J. H. COCK** begs to inform his FRIENDS and the PUBLIC that he has REMOVED from 74, Old Broad-street, to 2, CROWN COURT, TREADNEEDLE STREET (Ground Floor).

BUSINESS transacted in every description of stocks and shares, as usual, at close market prices.

**CITY EXCHANGE MINING AND GENERAL INVESTMENT OFFICE,**  
22, NEW BROAD STREET LONDON, E.C.  
J. R. ADAMSON, MANAGER.

We strongly advise the immediate application and purchase of ABERDAUNANT and TERRAS TIN shares, which undoubtedly will have a tremendous rise. There are no stocks that we can so safely recommend for investment.

We also advise the purchase of DOLOCATH, ST. IVES CONSOLS, and WHEAL SETON shares at present prices, and would call particular attention to the GEORGIN MINING COMPANY (Limited), now being issued in shares at 10s. on application. Prospectuses, plans, and forms of application may be had at this office. Those seeking a safe investment should apply.

Orders and Telegrams receive prompt attention.

**CORNWALL AND DEVON MINING AGENCY**  
CALLINGTON, CORNWALL.

This AGENCY NEGOTIATES the PURCHASE and SALE of MINES and MINING SHARES, either entirely at the risk of their clients, or the Agency will share the responsibility with their clients on terms to be known on application.

Gentlemen disposed to take advantage of the depression caused by the war, should communicate with us at once, as we can introduce them into absolute safe properties that will in less than six months command a rise of from 200 to 500 per cent.

C. FENGILLY, Secretary.

**FLORENCE AND TONKIN UNITED MINES.**—These shares are obtainable by application to the Purser, at Callington, from whom all information respecting the mines can be obtained.

The discovery of tin here in such quantities in the capels of the lode warrants the belief in the certainty of speedy dividends from tin alone.

**NOTICE.**

**NANTEOS CONSOLS MINING COMPANY (LIMITED).**—The OFFICES of this COMPANY are REMOVED from 3, Great St. Helen's, Bishopsgate-street, London, to the MINES, PONTERWYD, near ABERYSTWYTH, where all transfers, letters, &c., must be addressed.

London, August 5, 1870. THOMAS P. THOMAS, Managing Director.

**MR. EDWARD GLEDHILL, MINING AGENT AND ENGINEER,**  
MINING AND ASSAY OFFICES, SHREWSBURY.

**MR. EDWARD BREWIS, STOCK AND SHAREDEALER,**  
No. 54, OLD BROAD STREET, LONDON, E.C.

Business transacted for prompt cash, or if preferred for account in every description of tin, lead, copper, gold, and silver mining shares at net prices.

Money advanced on mining shares for account, or a longer period if desired.

OFFERS WANTED for, or any part of:—20 Sweetland Creek, 50 North Treskerby, 10 Great Western, 10 Yudanmutana, 20 Calbeck Fells, 10 General Brazilian, and 40 Pestarena.

Telegrams promptly attended to.

Bankers: The Alliance Bank, London, E.C.





# GWYNNE AND CO., ENGINEERS, ESSEX STREET WORKS, STRAND, LONDON, W.C.

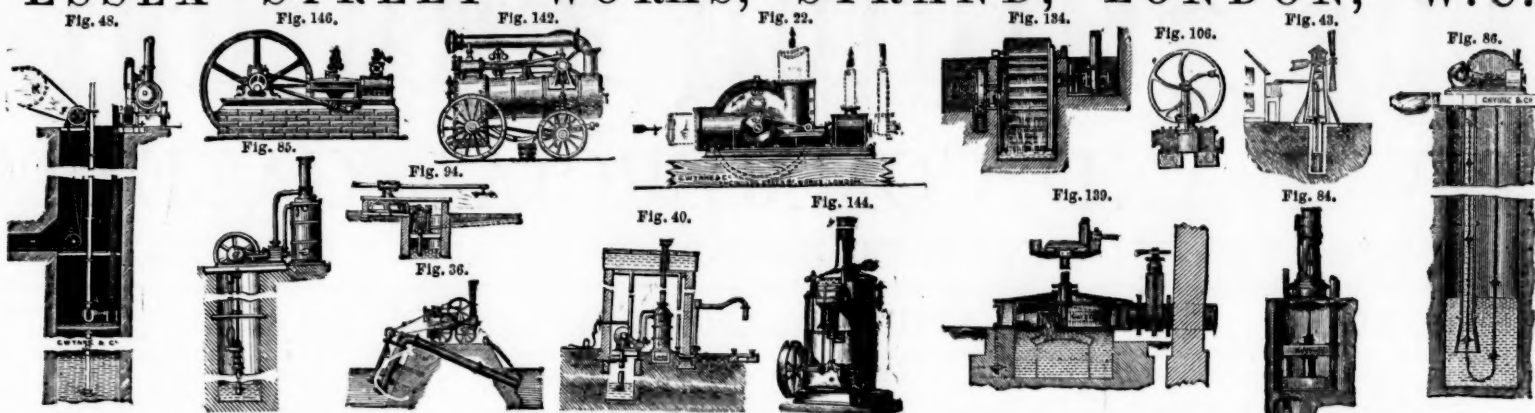


Fig. 144.—Vertical Engine, all sizes, from 2 to 20-horse power.  
Fig. 146.—Horizontal Engine, from 4 to 100-horse power.  
Fig. 142.—Portable Engine, from 2½ to 30-horse power.  
Fig. 40.—Gwynne and Co.'s Combined Stationary Pumping Engine.  
Fig. 139.—Turbine Water-wheel, from 1 to 300-horse power.

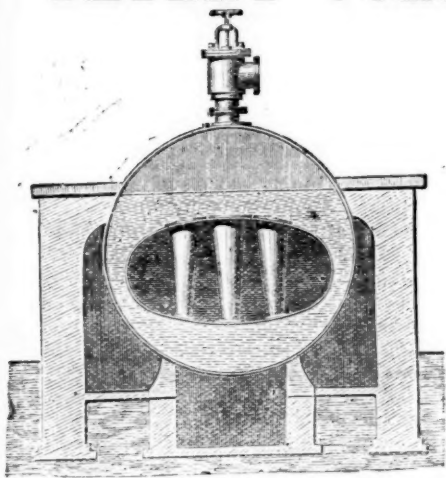
Fig. 22.—Combined Pumping Engine, all sizes, obtained Prize Medal, Paris Exhibition.  
Fig. 85.—Deep Well Pumping Engine, all sizes.  
Fig. 134.—Water-wheel Pumping Machinery.  
Fig. 36.—Gwynne and Co.'s Patent Syphon Drainage Machinery.  
Fig. 95.—Horse-power Pumping Machinery.

Fig. 86.—Chain Pump Pumping Engine.  
Fig. 48.—Deep Mine Centrifugal Pumping Machinery.  
Fig. 84.—Double-acting Vertical Pumping Engine.  
Fig. 106.—Gwynne and Co.'s Improved Plunger Hand Pump.  
Fig. 43.—Wind Power Pumping Machinery.

Steam Engines of all kinds and sizes, Hand and Steam Fire Engines, Water Wheels, Hydraulic Lifts, Cranes and Jacks, Steam and Water Valves, Hydraulic Presses, Sheep Washing Machinery, &c., &c.  
List of Centrifugal Pumps, two stamps. Illustrated Catalogues of Pumping Machinery, six stamps. Large Illustrated Catalogue, with many Estimates, &c., twelve stamps. All post free. GWYNNE and Co. have recently effected a considerable reduction in their prices, being determined to supply not only the best but the cheapest Pumping Machinery in the world.

GWYNNE AND CO.,  
HYDRAULIC AND MECHANICAL ENGINEERS, ESSEX STREET WORKS, STRAND, LONDON, W.C.

## GALLOWAY'S PATENT CONICAL WATER TUBES FOR STEAM BOILERS.



Section of the "Galloway" Boiler, showing arrangement of back flues, the furnaces being of the same construction as in the common two-flued boiler.

The above TUBES are made with such an amount of taper as will allow the bottom flange to pass through the hole in the upper side of the boiler flue, which renders their introduction into ordinary fluid boilers a simple operation, and with the following advantages:—  
The POWER of the BOILER is CONSIDERABLY INCREASED, and the FLUES ARE MATERIALLY STRENGTHENED.  
The CIRCULATION of the WATER is MUCH IMPROVED, and UNEQUAL EXPANSION with its attendant evils, PREVENTED.  
LIABILITY TO PRIME IS LESSENED.

These Tubes have now been in use upwards of fourteen years, and above 50,000 are in work in various parts of the country with the best results.  
They can be fixed by any boiler-maker, but can only be obtained from the Patentees.

W. & J. GALLOWAY & SONS,  
ENGINEERS AND BOILER MAKERS  
MANCHESTER,

Makers of Wrought-iron Parallel Tubes, 40s. p. cwt.

MANUFACTURERS OF THE WELL-KNOWN

"GALLOWAY BOILER,"

AS PER SKETCH ANNEXED.

UPWARDS OF TWO THOUSAND OF WHICH ARE NOW AT WORK.

BOILERS OF ANY DIMENSIONS, UPON THIS OR ANY OTHER PLAN, CAN BE DELIVERED WITHIN A FEW DAYS FROM RECEIPT OF ORDER.

STEAM ENGINES OF EVERY DESCRIPTION.

General Millwrighting.—Hydraulic Machinery.—Polishing, Grinding, and other Machines for Plate Glass.

LEAD ROLLING MILLS AND PIPE PRESSES. CAST AND WROUGHT-IRON GIRDER BRIDGES.

HALEY AND OTHER LIFTING JACKS, BOILER RIVETS, &c.—SCREW BOLTS, STEEL PUNCHING BEARS.

Shearing and Punching Machines Bending Rolls, and every description of Boilermakers' Tools, &c., &c.

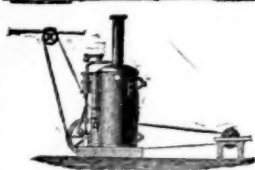
## CHAPLIN'S PATENT STEAM ENGINES & BOILERS

(PRIZE MEDAL, INTERNATIONAL EXHIBITION, 1862),

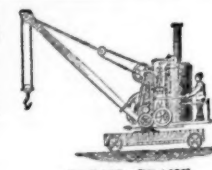
The ORIGINAL combined Vertical Engines and Boilers, introduced by Mr. CHAPLIN in 1855. Each class kept in Stock for sale or Hire.

WIMSHURST & CO., ENGINEERS,

OFFICES: 117, CANNON STREET, E.C. WORKS: REGENT'S PLACE, COMMERCIAL ROAD EAST, LONDON, E.



STATIONARY ENGINE.



STEAM CRANE.

## ROBEY AND COMPANY, LIMITED, ENGINEERS, LINCOLN.

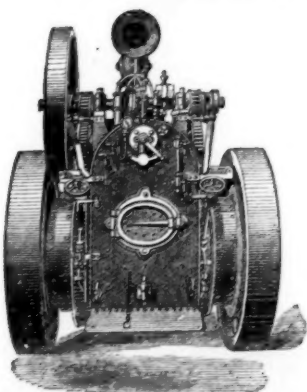
PATENT PORTABLE

HAULING AND WINDING ENGINE,

WITH

PATENT DRUM WINDLASSES,

FOR MINING PURPOSES.



This Engine is specially commended to Mining Engineers and others, as by its adoption—

Haulage along inclined drifts is easily and cheaply effected.

The expense of sinking new shafts is greatly reduced, neither foundations nor engine-house being required.

It is available not only for winding, but for pumping, sawing, &c.—a great desideratum at a large colliery.

It can be very quickly removed (being self-propelling), and fixed in any desired position.

Prices and full particulars on application as above, and also references to view the Engine in successful work near Derby, Carnarvon, Haverfordwest, Darlington, and other places.

PIT BAROMETERS—MINING INSTRUMENTS.

JOHN DAVIS,

MANUFACTURER OF MINING AND SURVEYING INSTRUMENTS,  
DERBY.

MAKER (by appointment) of HEDLEY'S DIALS.  
Price List on application.

STERNE'S PATENT PNEUMATIC SPRINGS FOR COAL CAGES.  
Price £8 10s. per set of four.



By a special method of preparation, this leather is made solid, perfectly close in texture, and impermeable to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of

I. AND T. HEPBURN AND SONS,  
TANNERS AND CURRIERS, LEATHER MILLBAND AND HOSE PIPE MANUFACTURERS,

LONG LANE, SOUTHWARK, LONDON.

Prize Medals, 1851, 1855, 1862, for

MILLBANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.



sufficient weight to make a solid head rail or a solid rail entire from a homogeneous bloom or of iron or steel of better quality and cheaper than by any other known furnace. It produces finer grades of iron for hoops, hinges, sheet, or boiler iron, and for rail works it has no equal, as plates can be made so that the splitting of nails is impossible. Other advantages could be named. Like the sewing-machine, it will relieve labour of much drudgery, and promises to do as much for the improvements of the age. Patents have been obtained in both this country and Europe, and we predict its general adoption.

*Cincinnati Daily Gazette*, July 23.

### Meetings of Mining Companies.

Mr. HUNT said his examination more than pleased him.—M

**OLD TREBURGETT SILVER AND LEAD MINING COMPANY**

SIR,—I am happy to inform you that considerable progress is being made on the mine. We are fast getting into the old workings, and no doubt shall very shortly be making returns to the old owners. By a letter just received from Captain Hancock he will put the flat-roads to work on Saturday to pump out the Grinde shaft. John's shaft has been cleared right down 27 fms., and communication effected from the new engine-shaft into the old one, and pumps dropped down into it, so that we are now fast draining the mine, and shall soon have our third shaft cleared up. I have also secured some very good specimens of pure silver and lead ores from the mine, which have been obtained from some of the

SIR,—I am happy to inform you that considerable progress is being made at the mine. We are fast getting into the old workings, and no doubt shall very shortly be making returns of silver ore. By a letter just received from Captain Black he will put the flat-roads to work on Saturday to pump out the Grinde shaft. The Grinde shaft has been cleared right down 27 fms., and communication effected from the engine-shaft into the old one, and pumps dropped down into it, so that we are now able to pump out the Grinde shaft. The Grinde shaft cleared up. I have this week received a box of very good specimens of silver and lead ores from the mine, which have been obtained from some of the



SLIOUS had proved that riches are dirt, for in the bottom level, where there was a mint of wealth, there was also mud enough.

Mr. BATTERS proposed the re-election of Mr. Page, which was seconded by Mr. HUNT, and carried unanimously.

The meeting terminated with a vote of thanks to the Chairman.

#### PRINCE OF WALES MINING COMPANY.

A general meeting of shareholders was held at the offices, St. Michael's House, on Thursday, Mr. J. Y. WATSON, F.G.S., in the chair. Mr. JEHU HITCHINS (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts was submitted, which showed a balance in favour of the mine of 1190*l*. 17*s*. 6*d*., exclusive of the last sale of ore, which will leave a small profit on the month's operations.

The report of the agents was read, as follows:—

Aug. 23.—Since the last general meeting Watson's shaft has been sunk to a depth of 2 fathoms below the 77 fathom level, trip-plat cut, penthouses, and bearers and cistern put in. The standing lift and sinking lift will be fixed and complete by Saturday next, when we hope to set to a full party of men (nine) to sink and make good the shaft to a depth of 90 fms. from surface perpendicular. The 77 fms. has been driven from 3 to 4 ft. wide, worth 10*l*. per fathom. Within 3 ft. of the present end we have communicated a rise with the winze from the 65, which has thoroughly ventilated the bottom levels, and opened up profitable ground for stoping. The 77 cross-cut has been driven 2 fms. west of the cross-course, lode 4 ft. wide, worth 8*l*. per fathom; the end at present is being driven by the side of the lode. The 77 cross-cut has been continued south 5 fms. 2 ft., and two small branches met with, which are about 4 fathoms apart; and being more the bearing of cross-courses than east and west lodes, we do not consider it to be the No. 1 south lode, and shall continue the cross-cut some 2 or 3 fms. further to prove it. The 65 west has been driven 2 fms., lode 2½ ft. wide, yielding a little saving work; in the present end the lode is not so large, and at present is suspended. The 65 east, on the No. 1 south lode, is driven 6 fms., lode varying from 1 to 1½ ft. wide, yielding occasional stones of tin and copper ore, but not enough to value. The 55 west has been driven 3 fms. 4 ft.; here the lode at present is small, being principally capel. The 55 west, on No. 2 north lode, has been driven 6 fms., lode from 3 to 4 ft. wide, composed of quartz, capel, pebbles, and mud, with occasional stones of copper ore, mixed, and letting out much water. We have two stopes working in the back of the 65 east, worth on an average 10*l*. per fathom each. Two stopes in the back of the 65 west worth on an average 8*l*. per fathom each. The stopes in the bottom of the 55 east is worth 6*l*. per fathom. The stopes in the back of the 55 east is worth 15*l*. per fathom. The stopes in the back of the 45 west is worth 6*l*. per fathom. The tribute department is looking well, and the men are getting good wages. You will see by the above that but little has been done in the east and west since the last meeting, which is the consequence of the no being sufficient air in the levels for more men to work. These points are now thoroughly ventilated, and we shall set on Saturday next to drive both east and west in the 77 by a full party of men, where, from present appearances, we hope to open out a good run of profitable ground. We now beg to introduce to your notice the propriety of sampling two-monthly, which will be very beneficial for the future working of the mine, in curtailing the cost for stoping, timber, dressing cost, samplers' fees, and expenses. If these suggestions be carried out, the same quantity of copper ore could be raised for 10*l*. a month less.—J. GIFFORD, W. GIFFORD.

The CHAIRMAN said that it was satisfactory to find the report was decidedly better than for some months past. He might mention that the committee had not lost sight of the question of silver in the mine, and application had been made to the Duchy for permission to sink upon the lode, as by their lease they were not permitted to break the ground within five fathoms of the boundary. He added that offers had been made to take their mine in the mineral. He hoped that at the next meeting a more favourable balance-sheet would be presented, as during the last three months they had no returns from the bottom levels, but they were now coming into full play.

The report was received, and ordered to be entered on the minutes, and the accounts were passed and allowed.

The committee of management were re-elected.

A vote of thanks to the Chairman concluded the proceedings.

#### PERRAN WHEEL VIRGIN MINING COMPANY.

The first meeting of shareholders since the formation of the company was held at the account-house on the mine on Friday, Aug. 19, which was largely attended, and amongst others, the following adventurers were present—Messrs. J. R. PAUL, Dr. Andrew Tregoning (Miners' Bank), Bray, Mearns, and Farley (Turro); Capt. Retallack (Chyenne), West (St. Blazey), Tremayne (Falmouth), Kendall, John Thomas, G. S. Arnall, Mitchell, Jenkin, Fausla, Bone, Kendall, Jun. (Redruth), Jenkin, Blackney (Blackwater), T. Mitchell (St. Day), Burgess (Perran Foundry Co.), J. G. Thomas (Harvey and Co., Hayle, Cambellack), Woolcock (Devoran); Capt. Bennetts and Borsale (Chiverton Moor); F. R. Wilson, secretary; Thos. Pryor, purser; G. E. Tremayne, manager; Charles Oates, agent, &c.

On the proposition of Mr. WATSON, seconded by Mr. WILSON.

Mr. JOHN R. PAUL was voted to the chair. The CHAIRMAN said he had no idea that he should be called upon to act as their chairman; but, as it appeared to be the unanimous feeling of the meeting, he would not hesitate to do so, and, without further remark, he would at once call on the secretary to read the notice convening the meeting.

This having been done, the accounts were read, showing a balance of 38*l*. 1*s*. 4*d*. of liabilities over assets to the end of June.

The CHAIRMAN said they had heard the accounts read, and he was quite sure their secretary or purser would be only too happy to afford any information. Messrs. West, Arnall, Tregoning, and other shareholders having made some appropriate remarks about the accounts, which were satisfactorily answered, the SECRETARY said he had gone into matters with the purser and agents as to their requirements, the purser had said, and he thought that if they made a 1*l*. call they would not only be able to carry on the mine until then, but they fully expected to see the bottom of the mine with the proceeds.

Mr. JOHN THOMAS thought that as they now had a small balance in hand, and the call purely a prospective one, 7*s*. 6*d*. would meet their requirements; he would not, however, press this, but should like to hear what the other shareholders had to say on the matter.—The meeting, however, decided for a 10*l*. call, which was carried unanimously on the proposition of the CHAIRMAN, seconded by Mr. ARNALL. This call to be payable by instalments of 5*s*. each, the first in thirty days and the second in sixty days from this date, and a discount of 5 per cent. allowed to those shareholders who paid their calls on or before the date referred to.

The CHAIRMAN said as they had got over the question of ways and means he should like to know what their manager had to say about the mine; and as he had, no doubt, prepared a report he would, perhaps, read it. This having been done, Capt. TREMAYNE (the manager) said they had fully explained matters in their report, and, therefore, he had very little to say more than what had been read, but he might mention that the more he saw of their property there he was convinced of its value. They had a very extensive sett both east and west and north and south, and, if indications went for anything, he was convinced they should open up a valuable mine.

The business part of the meeting terminated with a vote of thanks to the Chairman, soon after which the gentlemen present partook of a cold collation, under the able presidency of Mr. Paul, who was supported on the right by Messrs. Wilson, West, Retallack, &c., and on the left by Messrs. T. Pryor, Kendall, Bone, &c.

After ample justice had been done to the good things, the CHAIRMAN gave the usual loyal toasts, which are always received in a patriotic spirit by "One and All." He then gave what he considered the toast of the day, and that was "Success to Perran Wheel Virgin." (Cheers.) He was exceedingly well pleased with what he had seen since their appointment. It seemed only a month or so since they met at Turro, and when he looked round at the mine that morning, and saw the engine-house completed, with the other surface erections, and that they had cleared and secured so many hundreds of fathoms of levels, he must confess that Capt. Tremayne and Oates were deserving of their best thanks for the large amount of work that had been accomplished. (Cheers.) He had great confidence in the future of the mine, and he hoped that at their next meeting they would be able to see not only stones but heaps of lead at surface. (Cheers.)

Capt. TREMAYNE thanked the Chairman for the kind way in which he had spoken of him, and assured the meeting that he should continue to use his best endeavours to make the mine a success. He liked the appearance of his level, and south lode, and was very sanguine that as soon as the water was forked out it should be able to send up lead to dress for the market.

Captain OATES, in responding, gave a highly interesting account of the mine. He said it was now about twenty-three years since it was last worked, and as he was an agent in the mine then he was in a position to corroborate all that had been said about the property. (Cheers.) It was well known that their mine was not abandoned through poverty, as the old books showed that when it ceased working they had 400 tons of lead on surface, and the purser's hands. The abandonment was entirely owing to the death of a large shareholder. They had sold upwards of 600*l*. worth of lead, and the bottom of the mine was only about 26 fms. deep, and when they took into consideration that this ore was entirely raised from the north and south lodes, and that they had the rich east and west lodes of West Chiverton, Chiverton Moor, and Chiverton Valley running through their sett, and on which nothing had been done, he thought they must all agree with him that their prospects were of a highly encouraging character. (Cheers.) The Chiverton were safe in their Perran Wheel Virgin last worked, and nothing of importance was thought of east and west lodes. He thanked them for the kind manner they had spoken of him, and assured them that, with their able manager, he should continue to do his best for the company. (Cheers.)

The CHAIRMAN then said they had heard all about the mine and about their prospects, but there was another toast to propose, which was "The Healths of their Secretary and Purser," who had the management of their money. He knew the purser, and was sure the shareholders were safe in their hands, but he had not had the pleasure of forming the acquaintance of their secretary until the last meeting; however, he was very glad to see him, and he was convinced he was the right man for the place, and, therefore, he had much pleasure in proposing their healths, and hoped they would not be long before they would be able to give the shareholders of Perran Wheel Virgin dividends, instead of making calls. (Cheers.)

Mr. THOMAS PRYOR (the purser) said that as he was the junior he had better, perhaps, speak first. He need hardly say how pleased he was to see such a large company of shareholders present, so that they could see for themselves how their money had been laid out, and it was a very gratifying to hear from their excellent Chairman and the other shareholders that they were pleased with the work that had been accomplished since the commencement of operations. He could assure the company that they were all pulling together, and he had great

confidence that what had been said about the mine by their manager and agent would be verified. He thanked them most heartily for the way they had received his name.

Mr. WILSON said he was uncommonly well pleased with the work that had been done at the mine, and he should go back to the London shareholders with a very flattering account of their prospects. (Cheers.) Although he had not long had the pleasure of the acquaintance of most of the gentlemen present, yet from the kindness he had received from one and all, he was beginning to feel already as if he were among old friends. He would assure the company that he would, with his able colleague, do his utmost for the welfare of the company. (Cheers.) He concluded his remarks by proposing, in highly eulogistic terms, the health of their Chairman, who had so ably conducted the business part of their meeting, and who had also most ably presided over their little festive board. (Cheers.) Mr. Paul was too well known for him to say more in his praise, and, therefore, he would, without further remarks, propose his very good health, and he hoped he would be spared for many a year to preside over their meetings. (Cheers.) Mr. PAUL, on rising to respond, was received with great cheers, and after silence had been restored he said he was very much obliged to Mr. Wilson and to the company for the kind way they had received his name; he had, as he said before, great confidence in the future of the mine, and if he could at any time render them any assistance he should be only too happy to do so. (Cheers.) Mr. T. PRYOR said there was one toast he thought they should drink, and that was the health of their absent shareholders. (Cheers.) There was one gentleman in particular absent to whom he thought they were under great obligations, and that was Sir Frederick Martin Williams, M.P. (Cheers.) He was the first to place his name on the list of shareholders, and had from the commencement taken a lively interest in the welfare of the concern. He should never forget the kindness with which Sir Frederick received him and Captain Tremayne, when they called on him about the formation of the company; that gentleman, after he had satisfied himself of the character of the property, at once took a large interest with them, and said if they had any trouble about getting the shares taken up to come to him again. (Cheers.) He thought they had, therefore, acted wisely in naming the engine-shaft after Sir Frederick, and concluded by proposing his health as one of the absent shareholders, which was received with acclamation.

Mr. BURGESS, in responding on behalf of Sir Frederick, returned his thanks for the very handsome manner in which Sir Frederick's name had been received, and he could assure the Chairman he should with great pleasure take back to Sir Frederick a very favourable report of the mine.

Mr. CUNLiffe, the engineer to the company, in responding to the toast of his health, assured the meeting that he would do his utmost to have the engine at work by that day month. (Cheers.)

Mr. BONE, in responding to the toast of his health from the Chairman, said he felt assured they had an excellent property, and from the vigour already displayed on the surface operations he had no doubt whatever the development of their underground workings, also in sinking shafts, &c., would be attended with success.

Messrs. THOMAS, TREGONING, KENDALL, ARNALL, and others, expressed themselves highly pleased with what they had seen, and felt continued confidence in the ultimate success of the mine.

Mr. JOHN THOMAS made some thoroughly practical remarks respecting the working of mines in general, which were well received.

The meeting was a most unanimous one, and terminated in the most pleasant manner.

#### PLYNIMMON LEAD MINING COMPANY.

The first general meeting of shareholders was held at the offices, Austinfriars, yesterday, Mr. E. W. WINGROVE in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting. The report was read, as follows:—

Aug. 25.—Since the commencement of operations by the present company the principal underground work has been the extension of the 12 cross-cut 18 fms. This has opened ore ground of the average value of 2 tons per fathom for the whole distance, and the lode in the present end will still turn out 2 tons of lead ore per fathom. About 4 fms. before this end a winze has been sunk 7 fathoms below the adit level, by the side of a lode, we believe, as good as that seen at the 12; and when these two points are communicated, in about six weeks' time, we shall then have a fine piece of ore ground properly ventilated and cut open for stoping. The improvement in the lode in the 12 since the present company took possession of the mine has considerably increased the reserves of ore, which may now be taken at full 20,000*l*. worth. Four stopes have been in work at the adit and 12 fms. levels, yielding about 15 cwt. of lead ore per fathom, but, owing to the very dry weather of the last four months, we have been unable to draw but little of this out of the mine, and we estimate the accumulation of ore now lying broken underground at 100 tons, which otherwise would have been dressed and sold. At surface ground has been excavated, and the pit built for a 50 ft. by 3½ ft. water-wheel. We completed the pit yesterday, but may say that a delay of full three weeks has been the work for want of seasons. We have two carpenters now busily engaged on the wheel, the erection of which, with the pulley-stands for new line of pumping-rods, we hope to have complete in five weeks, and put to work. This large wheel will effectually drain the mine, and set the present 40 ft. water-wheel free for continual drawing and crushing of ore-stuff. As soon as the new wheel is at work, and the water drained to the 24, the engine-shaft should at once be sunk as fast as possible for a 36, and still deeper levels; the 24 driven west of shaft, where the ground before the present end is all whole to surface; the engine-shaft should also be pushed forward east into the good run of ore now seen going down below the 12, at the eastern end of the mine. The adit level has not been driven by the present company for want of ventilation, although the end stands in a lode worth 1½ tons of lead ore per fathom. When the winze before alluded to has been communicated with the 12 it will be driven immediately, and, with the 12 still laying open ground of the value of 2 tons per fathom, these two levels will greatly add to the present reserves of ore, as well as quickly place the mine in a position to give regular returns and good profits. The mine looks well, and has improved very materially since purchased by the present company.—J. PAUL.

The CHAIRMAN said that the present meeting was held in compliance with the provisions of the Companies Act, and, therefore, was purely formal in its character. The report, however, just read could not fail to be most satisfactory to the shareholders.

Mr. MURCHISON, in reply to a question, stated that the 100 tons of ore referred to in the report had been obtained from the 12 cross-cut, and the adit and 12 fms. level, where the lode was valued at only 1½ cwt. per fathom. So that none of that ore had been taken from those points where the lode was valued at 2 tons per fathom.

Mr. EDWARD COOKE said he had been underground at Plynlimmon, and the result of his visit was that he had increased his already large stake in the company. Although that was not the place to refer to the price of shares, he could not refrain from comparing Plynlimmon and its reserves of ore, of the value of 20,000*l*. and an unexpended capital of 7,000*l*., with other mines, without reserves and without capital, which were selling in the market at high premiums. Shareholders in Plynlimmon, however, might with perfect confidence depend upon the intrinsic merits of the mine, and disregard market value, although, no doubt, that would come when the public began to see the real tangible value of the property.

The CHAIRMAN mentioned that 48 tons of ore had been sold, and after deducting every expenditure, including the cost of the new water-wheel, the unexpected capital amounted to over 7,000*l*.

Mr. MONTPELIER (a director) said, in company with his colleagues, he had recently visited the mine, and was indeed much pleased.

A SHAREHOLDER had understood that no less an authority than the Chief Inspector of Crown Mines had expressed a highly favourable opinion of Plynlimmon, and looked forward to it eventually proving second only to the deservedly celebrated Van.

Mr. MURCHISON, in reply to a question, stated that two months since the "reserves" were valued at 20,000*l*., and the mine since then had considerably improved in value, and making every preparation for the full starting of the three powerful engines in that mine. He was glad to say that within a few hours they had a splendid start, and have for eight days successively been pumping a complete river of water. According to the general rule of calculation, the three engines are pumping from the mine 3,257,280 gallons of water daily. I have been on the mine to-day, and am told the bottom level has appeared in sight, and by to-morrow they expect to go through that level dry. I heartily wish them every success; they have a real good mine, and no doubt will soon be selling large quantities of ore.

A vote of thanks to the Chairman concluded the proceedings.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

MINING IN FLINTSHIRE.—A few days ago, when the inhabitants of Halkyn Mountain awoke up in the morning, they were delighted to hear that all the men working in the Rhosmor Mine were hand and heart engaged in kindling fires, and making every preparation for the full starting of the three powerful engines in that mine. He was glad to say that within a few hours they had a splendid start, and have for eight days successively been pumping a complete river of water. According to the general rule of calculation, the three engines are pumping from the mine 3,257,280 gallons of water daily. I have been on the mine to-day, and am told the bottom level has appeared in sight, and by to-morrow they expect to go through that level dry. I heartily wish them every success; they have a real good mine, and no doubt will soon be selling large quantities of ore.

WHEAL MARY LOUISA (formerly Trebell Consols).—This mine is situated in the parish of Lanivet, and adjoins the Repery Mine. It is held under grant from the Duchy of Cornwall, and the greater part at 1-24th, and the remainder at 1-20th dues. Competent authorities pronounce its position to be most advantageous for a speedy and economical development, and consider it to be one of the most desirable pieces of mining property in the district. There are several well-known lodes in the sett, and, from statistics obtained from the agent of the lode, it is ascertained that tin in considerable quantities has been returned by former grantees at a small outlay, and when the price of tin was very low. The profit in their workings was much reduced by the fact of the tin being sent to the coast for shipment, and the company have purchased a steam engine and 32 heads of stamps, which they calculate being at work before the end of the year, and from results already obtained, they are fully warranted in saying that returns of tin in remunerative quantities can then be made, with every prospect of rich deposits at a greater depth. It is calculated that not more than 5*l*. per 1-12th share will be required. Among the shareholders are the Right Hon. Lord Roberts, Sir Frederick M. Williams, M.P., and other influential parties.

NORTH TREKERRY.—When will the lords of mining properties look to their own proper interests, and not to be done by throwing obstacles in the way of adventure, but rather by assisting their views? This mine, which has for years paid a large yearly sum in due to the mineral lords, asks for an addition to their sett, in the shape of a piece of unworked locked up ground, known as Scorrer Consols, belonging to the same owners. This, it would seem, does not appear likely to be granted, although Captain Richard Pryor has been most indefatigable on behalf of the adventurers to obtain it, and it may be mentioned already holds the grant from the Duchy for their share. What possible objections can the lords have? They know perfectly well that the ground has for years been developed faster and better by the North Trekerby Company than by any one else. However, they will shortly have to work the property on their own account, or leave it alone for the adventurers, who have now decided to have what they ought to possess or nothing. No wonder that capital should

be diverted from Cornwall, and its mines be stopped, when lords, lords' agents, and even pursers of mines, combine to prevent any benefits ever going into the pockets of the struggling adventurers.

TREKERRACK.—The works, which are carried on very energetically, progress rapidly, and with success. The engine-house is nearly completed, and will shortly be ready for the reception of the 36-in. engine, recently bought from the North Shepherds Company. The arrangements so far reflect great credit on all concerned, and there appears to be no doubt whatever that the adventurers will soon be rewarded for their outlay. The mine is splendidly situated, and all authorities who have seen it agree in thinking that it is one of the most promising concerns ever started.

ROSE AND CHIVERTON.—The shaft is now being sunk below the 20 fms. level with all dispatch. Should the anticipations of those most qualified to judge be realised, there is a brilliant future before this mine, provided the works are energetically carried on, as at present.

#### MINING IN AUSTRALASIA—MONTHLY SUMMARY.

MELBOURNE.—In the Berlin district a lump of gold weighing 93 lbs. 5 ozs. has been found by a storekeeper and his son-in-law; its length was 12 in., and circumference in the centre 15½ in. A 24-lbs. nugget has also been found at the Argus Claim, in Sallor's Gully. When retorted it returned 180 ozs. of gold. Another nugget found three weeks ago in the Castlemaine district weighed 215 ozs. The departure of gold ships since the 1st of June has been—May 22, Avoca, for Point de Galle, 101,200 ozs.; June 10, You Yang and Pandemon, for Sydney, with 525,000 ozs.; 15th, Great Britain for Liverpool, 23,300 ozs.; 17th, Lizzie, for Newcastle, 480 ozs. Total gold export from Jan. 3, 665,374 ozs. of which 100,934 ozs. transhipped from New Zealand. During corresponding period of 1869 the entire export was 691,106 ozs.; 69,229 ozs. from New Zealand.

Some very rich quartz reefs have been discovered at Diamond Creek, about two hours and a half journey from Melbourne. Large quantities of gold are being extracted, and much money is being made by some of the lucky adventurers.

SYDNEY.—The wet weather has seriously interfered with diamond mining at Mudgee. Operations are, however, becoming gradually of a more extended character. In a recent paper read before the Royal Society of New South Wales the Rev. W. B. Clarke, the eminent geologist, states that he believes the gems dug out are greatly inferior to those to be obtained when capital is properly applied. At Gulgong reef a party yesterday turned up two nuggets, one 90 ozs. the other 30 ozs. Tambourva reports state that 13 tons of quartz yielded 1100 ozs. gold. A rich reef of lead and silver ore found near Wallabadah.—The New Rush Gulgong: The sinkings vary from 5 fms. to 12 feet, with an average of 18 in. Wash dirt giving 14 dwts. to 24 dwts. of gold to the lode. Several nuggets from 4 ozs. to 8 ozs. found, and a good-sized diamond taken out of one cradle. A new quartz-crushing machine—spoken of as a great improvement—has been patented by the inventor, Dr. B.

ADELAIDE.—The month's mining news is not important, several excellent crushings of cement for gold have, however, taken place at Barossa. At the deep lead 10 tons crushed gave 4½ ozs. per ton, and hundreds of tons ready to be operated on. The English, Scottish, and Australian Chartered Bank alone has purchased from this field 20,000*l*. worth of gold.

NEW ZEALAND.—The gold fields accounts are favourable. A rich copper lode has been discovered in the pioneer claim, Collingwood.

RICH DISCOVERY AT THE BREMER MINE.—While the cross-cut at the 103, west of Legg's engine-shaft, was in course of being driven to cut the main lode a valuable discovery of copper was made during this month. A lode which had been of little value in the upper levels was intersected, and yielded copper of rich quality in considerable quantity—grey, purple, and yellow, colored black of 20 to 30 per cent., which cannot fail to raise the average quality of the mine and to improve materially the position of the company. This lode appears to be from 5 to 10 feet wide, and has yielded about 8 tons in 7 ft. driving. One pair of men are driving south upon the course of the lode, while another are pushing on the cross-cut further west to intersect the main lode, which is expected to be 3 or 4 fathoms ahead. In the 93 cross-cut, east of Legg's engine-shaft, Boundy's lode has been discovered and driven on several feet. It will yield about 2½ tons per fathom, but is very hard. The drive is being made the lode for advantageous stoping hereafter. As the furnaces have been busy seeding, the supply of wood has been short, and the Collingwood furnaces, like all the month, but several having commenced early, the furnaces will be at work again before very long. The quantity of ore raised and dressed during the month is about 180 tons. This is below the usual quantity, but as an alteration has been made in deepening, with a view to raise the percentage from 8 to 12, it is expected that the yield of fine copper will be about the same as usual. This alteration is expected to effect a considerable saving in firewood, besides causing the ore to be more easily converted in the furnace.—South Australian Register.

#### AUSTRALIAN MINES.

JUNEDAMUTANA (Copper).—The superintendent states (Adelaide, June 29).—The only development that our limited means have enabled us to carry on during the past two years has been sinking and driving upon places where ore was showing. In pursuing this course we have expended a considerable sum in proving the mine, and in following up ore wherever it was to be found we have discovered the sulphurets at the 50. This we consider has amply repaid our outlay, and we look forward to good results from this part of the mine alone. I am confident of being able to pay a preferential dividend when the necessary works detailed in mine of March 2 are carried out, and have no doubt that those of the officers of the mine who have the means will take up shares of the new issue; and I myself will gladly take a portion of the company's debt to me in preferential shares. The better position we shall be placed in by procuring the new works will result from the immense saving of labour in wheeling and hauling, and the almost certain discoveries of new deposits. To these two sources alone, the former of which is certain, we look for profits in the future. The report of Capt. Terrell furnishes you with an account of the heavy rains in the north, in consequence of which we shall be able to get in any quantity of wood we require. I intend going to the mine, if possible, next Friday, there to remain, perhaps, two or three months, so as to insure the greatest amount of exertion possible on the part of our officers and men.—Railway, North: You will see by the papers that Parliament met on May 27, that the Governor's speech mentioned the desirability of opening up the far north by a railway, and that the Government have pledged themselves to bringing in a Bill early next session to construct 200 miles from St. Augusta northwards. The Telegraph Extension Bill from the Darwin to St. Augusta has passed both Houses, and the line is commenced. Capt. Terrell reports, under date June 11:—(Hillman Mine): A few days after I wrote my last report I was compelled to put out all the furnaces, on account of not having sufficient fuel for my wood. The roads were for any terms to travel. I, therefore, discharged all the underground men excepting the party in No. 1 winze. The lode in this place is still looking very well, and all the other places are looking just the same. This week we have had a fine lot of wood brought in, which enabled us to put Nos. 2 and 5 furnaces at work, and I am pleased to say we tapped out a very good lot of regular. The two furnaces will keep the roaster going, and as we have been able to dress our ore to a higher percentage, no doubt we shall be able to turn out a fine lot of metal. The ground around several lodes of ore, and at times large soft nuggets of rich ore, horse feed, which has been a very heavy item in the cost for a long time past. Ore raised from June 1 to 11, 45 tons; smelted, 60 tons; on hand, 83 tons.

PORT PHILIP AND COLONIAL (Gold).—Mr. Bland, Clunes, June 17: The quantity of quartz crushed during the four weeks ending May 25 was 370 tons; pyrites heated, 63 tons; total gold obtained, 901 ozs. 8 dwts., or an average per ton of 4 dwts. 20 grs. The receipts were 340*l*. 18*s*. 1*d*.; payments, 327*l*. 16*s*. 3*d*.; profit, 12*l*. 1*s*. 10*d*., which, deducted from the debit balance on joint working account—504*l*. 8*s*. 2*d*.,—left a debit balance of 491*l*. 6*s*. 4*d*. The return for the three weeks ending June 15 was as follows:—Quartz crushed, 259 tons; total gold obtained, 581 ozs. 4 dwts., or an estimated yield per ton of 4 dwts. 2 grs.

WORTHING.—Thomas Frisk, June 18: Bremer Mine: We have not made the speed we thought to have made in driving the 103 cross-cut, owing to having met with a number of branches in driving; in fact, we have had them crossing the level for the last 4 fathoms, and all of them carrying ore of a very strange character. The lode is composed of rich grey, ruby, black, and yellow coated with black, white iron, peach, and quartz. Such a mixture I never saw before, at so low a level. This looks to me very strange, after having nothing but yellow ore throughout the mine from the 32 fms. level to the present depth. The greatest drawback is we cannot break it with speed, it being very hard. The ground around several lodes of ore, and at times large soft nuggets of rich ore. Now, there are many opinions about what this great change means; some say that it is the top of a large and rich deposit of ore leading to the main lode going south, others think it is the main lode making a change close up to the hard bar; my opinion is that it is the same branches that you will find an account of by looking over my reports, which we met with in driving the 64, 73, 83, and 93 cross-cuts, making towards the lode, and now in the 103 beginning to make ore. I would not like to say that in no part of the branches is the lode close to the soft bar, and that by driving north we should not get into the main lode, but I do not think it. First, there is little or no water coming from the north, whilst there is a good stream coming out of the south, and because we have got into clean ground in the cross-cut, which has been dry for some time, and is now beginning to let down water, as it does generally about 1 or 2 fms. before we cut the lode. Be this as it may, it appears to me a very fine feature in the mine, and ought to start the sinking of Legg's engine-shaft at once, but this, I am sorry to say, we cannot do unless the company send out money to help us in these bad times, and I fully believe they will be paid for it in the end. The 22 end north is stopped for the present, being hard, and will not pay at the present price of copper; the lode in the present end will yield about 2 tons of ore to the fathom—the price for driving would be about 16*l*. per fathom. We have cut Boundy's lode, and drove about 2 fathoms on it; the lode is hard, about 3 ft. wide, composed of white quartz and yellow ore, and will yield about 2½ tons to the fathom. This is also stopped, as it will not pay at the present price of copper. The stopes are about as last reported. The quantity of ore raised and dressed is about 150 tons; you may account for this by reason of dressing the ore cleaner to save expense with wood. The number of hands employed is 123.

SCOTTISH AUSTRALIAN.—The directors have advices from Sydney to June 15, with reports from the Lambton Colliery to June 13. The sales of coal for the month of May were 12,600 tons.

ANGLO-AUSTRALIAN (Gold).—Capt. J. Raisbeck, June 18: No. 1 engine-shaft has now reached the depth of 138 ft., 138 ft. of which is securely timbered, the ground is about the same, and water not increasing much. No. 1 winze is down to water level—6 ft., the sinking stopped for the present, and have commenced to drive north on a lode 3 ft. thick at the 35 ft. level, which promises to pay well, as gold is freely obtained from it by washing. At 63 ft. in the shaft we struck a leader 1½ in. thick, and another at 83 ft., "rubby" stone.

AUSTRALIAN UNITED (Gold).—Mr. Kitto, June 18: We are experiencing at present one of the wettest seasons on record, and our surface works at the Central are greatly impeded in consequence. We anticipate a severity of week with the washing machinery, the delay being caused by the severity of the weather. The engineer informs me positively that washing will commence on Tuesday next, two days hence. The reports of the agent and engineer of the Central are not to hand at post closing. With regard to the Central Mine, Mr.



Lamb states:—"I have myself taken dirt from the four faces already opened, and washed from each bucket a sample of gold, acknowledged by experienced and disinterested men to be at least four-power paying quality." From the Duke of Cornwall Mine, Capt. Williams (June 18) reports:—"Daukes' engine-shaft has been sunk 15 ft. 8 in. during the past month. The men when not sinking the shaft have been engaged in driving the eastern cross-cut in the 200 feet level. My last report stated that quartz had been struck in the bottom of the cross-cut; the vein proved a much larger one than any cut since we passed Cattle's lode. I am inclined to believe we are approaching more stone, as water is increasing. I have nothing further to report."

**ENGLISH AND AUSTRALIAN (Copper).**—The directors have advices from Port Adelaide June 20.—There were four furnaces and one refinery at work at Port Adelaide. The new wharf at Port Adelaide was expected to be completed in about a month from date of advice. The Government steam dredge and spoon barges were actively at work dredging opposite the wharf. The manager had returned to Adelaide, having left the new works at Newcastle in a forward state. The 111 tons copper, advised by last mail as ready for shipment, had been shipped, and a further quantity of 200 tons was in course of shipment.

## FOREIGN MINES.

**DON PEDRO.**—The directors have received the following telegram from Lisbon:—"Weighed to July 30, 4529 ozt.; estimate for July, 6529 ozt."

**ECLIPSE (Gold).**—Capt. Barratt, California, July 23: Since I last reported progress we have laid the track, and the miners are now engaged clearing the mine and making preparations for sinking the main shaft below the 160 feet level. A party is also engaged opening the 160 feet north end, lode 16, 160 feet level. The lode in the 200 feet level; this shaft is sunk adjoining the cross-course, consequently the lode is a little disordered in it, but about the 6 feet north of the shaft the lode is 6 feet wide of good milling quartz, that will give from \$30 to \$40 the ton for a distance or length of several fathoms. In the bottom of this level a winze is sunk 20 feet below the bottom of the shaft; the lode in it (the deepest point in the mine) is from 6 to 7 feet wide, of excellent milling ore. This winze we shall not have anything to do with for the present, as I intend to sink the main shaft to the 200 feet level, then we shall drive and open up a considerable amount of ore. There is a great quantity of reserves at present in hand. I find there is a considerable quantity of valuable reserves present very near the surface that can be taken away at very little expense; standing very near the surface, showing free gold throughout. We have considerable reserves on hand, and when we get our mill (stamp) in operation, the Eclipse will show itself a first-class gold mine. We have yet a little preliminary work to put the mine in good working order—fix whelm on the main shaft and put a double track in it, fix the lowering machine on the incline, &c., which will all be done within two months; after that, the operations of the mine, extraction of the ore, &c., will be carried on without let or hindrance. I will as early as possible forward you a plan and section of the Eclipse Mine. I am glad to hear the stamps and machinery are on the road to California. When they arrive they shall be fixed and put in operation as quickly as possible. The boiler and fittings are by this time on the road from San Francisco to this place. I have sent for more miners, who I hope will be dispatched as quickly as possible, as they are required. We are doing all possible to expedite the work, and when the mill or stamps are erected and in operation the returns will be such as to dispose of all doubts in reference to the profitable working of the Eclipse Mine.

**ANGLO-ARGENTINE.**—Captain J. Vivian reports for June that, at South Mine, Captain, the engine-shaft is sunk from surface 36 fms. 3 ft.; the ground in the bottom of the shaft is clay-slate, of a silky lustre. The cross-cut driving east of the engine-shaft, in the 20, is now in 9 fathoms; no change in the ground since my last report. Main Lode: The adit level is driven north of the cross-cut 5 fathoms, at which point we have met with some old workings; the lode was undoubtedly very rich, as it is worked very bare. In the adit level, driving south of the cross-cut, we have had a splendid lode nearly all the month, but the end is not looking quite so well. Manager: In driving the cross-cut at the base of the hill we have intersected the main lode, and cut it to the east about 6 feet; at this point it is not rich, it being mixed with limestone. I think we shall have an improvement here shortly; to the north of the cross-cut we have met with some old workings. North Mine, Colonel: The shaftmen are making good progress in cutting plat in the 20, and the same will be finished next month, if all goes well.

**BATTLE MOUNTAIN.**—Wm. Nancarrow, Nevada, Aug. 3: Virgin Lode: The lode in the 73 feet level, north of the winze, is 4 feet wide, and much improved since last week; it is a splendid lode of copper, looking better than ever it has at this level—it is driven 25 ft. north of the winze, and looks fair to continue. The stopes in the back also look much better than it did last week. The lode in driving south of the shaft is from 3½ to 4 feet wide, but up to the present time is of no value; there is only a little stain of copper, no substance. We have looked Pickett's shaft, and have now splendid air in this part of the mine. Lake Superior: In driving north at the bottom of the shaft the lode is large, and contains a little ore, but does not improve as I expected, and as we get further into the hill the ground appears to get much harder. In the south level, I told you in my last, we had begun to stop the back home against the slide; this lode has very much improved since my last, it is 6 feet wide, a really good one for the kind of rock it is in the Virgin. Mr. Brand will be up to the shore soon some stone from this ledge. But in this mine (L.S.) we have little or no air to work—the men cannot do one day's work in four, in fact; we cannot keep the candle burning at all. The weather has been very hot—extremely so, and the air being so very light, owing to the great elevation, that scarcely any air plays down at all. This place where we have been stopping is only in some 25 to 35 ft. from the shaft, had it been in 90 or 100 ft. from the shaft I would go down in the little fall, and sink another shaft for air, but if we sink our present stopes we shall have to go right into the middle of our ramway-road, besides it would take two months to get it down, and by that time I hope the heat will be moderate. As we have a good deal of assessments to work up, I have decided to put two men on the assessments, and another two to assist in drawing up the ore, &c., at Virgin shaft, for I think that we can make for the Lake Superior at the Virgin. Nothing new in the shaft on the Hallow's lode, and nothing doing on the Troy. We have not sent down much ore since last week, only about 200 sacks, which will make our stock at the railway station about 900. The reason we have not sent more is that the wagons broke down. We have close upon 300 loaded on the mine at present, and I think, especially as far as the Virgin is concerned, we have never been in such a good position for taking out ore before. I wish you could manage to put up the price of copper, as it is a pity to sell the ore we are now breaking at the present low price.

**EXCHEQUER (Bullion).**—Capt. Chalmers, Aug. 1: The north drift is now in 51 ft., and has revealed some good second-class ore. I propose carrying this drift still further before stopping out the ore we have passed. The winze is down 69 ft., and has passed through some first-class ore, but scarcely any of it was taken out, the pitch of the ledge having become so flat, or there being a bulge to the east, that, continuing our proper angle in sinking, we have not almost under the drift, and in the bed rock. In a week or so I shall be back in the ledge casing again. We have been grading foundation for the house, and are now grading for the carpenter's shop and first-class ore-house under that building, pending the completion of my arrangements for ventilation. A road has been made from the mine to the wood ranch, a ventilating-furnace has been erected, and the pipes are on the ground to connect with the air-shaft, in which I shall be again at work so soon as the outside work, just referred to, is finished.

**UNITED MEXICAN.**—Guantanamo, July 19: In our mines I am unable to report any new discovery, though on the whole we are doing better than at the commencement of the year.—Mine of Jesus Maria y Jose: The work in this mine has been continued much as usual; the discovery in the discovery in El Socorro shows no improvement.—Mine of Remedios: The workings are much in statu quo. The frentes going off northward towards La Trinidad continue poor. Upwards, in San Crescencio, the lode gets narrow, though it is in good ore. Some accounts show a profit of \$4100, of which \$2392 appertains to the company.—New Concern: Adit of San Cayetano: Notwithstanding the great heat and want of ventilation in the adit, the work advanced during the month of June to some extent. The 5th level, the water here is opening up good iron rock.—Mine of Buenos Ayres: In this mine the water here is opening up good iron rock.—Mine of San Antonio de la Ovejera: The rock in the cross-cut in this mine is extremely hard, and from appearances I should be led to suppose that we are not very distant from the upper wall of the lode, but as we are getting on very slowly we may be some time before we reach it. The cross-cut on the 16th July was 322 metres long.

**LINARES.**—Aug. 17: West of Engine-shaft: The lode in the 85, west of Warner's engine-shaft, is disarranged and poor. The ground in the 75, west of Crosby's, is hard, and the lode unproductive. The 65, west of San Francisco shaft, yields 1½ ton of ore per fathom; this level is opening up good tribute ground. The 65, east of San Francisco shaft, is worth ¾ ton per fathom. The lode in the 55, west of this shaft, is small and poor. No improvement has taken place in the 55 east. The 45, east of San Francisco, produces 1 ton of ore per fathom; the lode is composed chiefly of quartz and lead ore. In the 31 fm. level, east of the above shaft, the lode has been very small and unproductive for some time. The driving is now suspended. The 25 east is also unproductive.—Shafts and Winzes: The ground at Crosby's shaft, below the 75, is getting hard for sinking. No. 173 winze, below the 55, yields 2 tons of ore per fm.; this is going down in a productive lode.—Los Quinteros Mine: The lode in the 55, east of Taylor's engine-shaft, is large, yielding occasionally stones of lead ore. The 55 west is without change since last report. The 45, west of Taylor's, yields 1½ ton per fathom; this is opening good tribute ground. In the 45, east of Taylor's, the lode is large, yielding ½ ton of ore per fm., and the ground easy for driving. The lode in the 32, east of Addis's shaft, is very regular and well defined, producing 1½ ton per fathom. The 32, east and west of Henty's shaft, is still in old workings; there have evidently been large quantities of lead taken away from here. No improvement has taken place in the 32, west of San Carlos shaft. In the 32, east of San Carlos shaft, the ground is hard, and the lode small and poor. We have cut the lode in the 45 cross-cut, south of San Carlos; the lode is composed of quartz and lead ore, yielding of the latter ¾ ton per fathom. There has been no change in the 32, south of Cox's shaft, since last report.—Shafts and Winzes: The lode at Addis's shaft, sinking below the 82, is quite poor at present. Cox's shaft is being sunk below the 32 as fast as possible.

**ALAMILLOS.**—Aug. 17: The 5th level, east of San Rafael shaft, yields 1 ton of ore per fathom; the lode is more open, and the ground a little better for driving. The 5th level, west of this shaft, produces ¾ ton per fm.; the lode is very compact, and spotted with lead throughout. The 4th level, west of San Martin shaft, is worth ¾ ton per fathom; the lode fluctuates a great deal, and the ground is hard for driving. The 4th level, east of La Magdalena shaft, is valueless. The 5th level, east of La Magdalena shaft, yields ¾ ton of ore per fathom; this is communicated to San Enrique shaft; lode large, and off in value in the last few days. The 6th level, east of Taylor's shaft, has fallen off 1 ton per fathom. The 6th level, west of Taylor's engine-shaft, the lode in the 5th level, this lode is large and strong, and looks well. The driving of the 4th level, west of San Yago shaft, will be resumed shortly, a short cross-cut being required south to hole to the shaft. The 2d level, west of Cox's shaft, is worth 1 ton per fathom; the lode, which is irregular, yields some fine stones of ore. The 2d level, east of San Victor shaft, yields 1½ ton per fathom; the lode and ground continue unchanged. In the 2d level, west of San Victor, the ground is hard, and the lode unproductive. No change

has taken place in the 3d level, east of San Victor. The 3d level, east of cross-cut, yields occasionally stones of ore. The lode in the 3d level, west of cross-cut, is in a very unsettled state at present. The 2d level, west of San Carlos shaft, produces some good stones of ore, but not enough to value. The 2d level, east of Addis's shaft, produces 1½ ton per fathom; the lode continues unchanged, letting out water freely. The 2d level, west of Addis's, produces 1½ ton per fathom; the lode is getting larger, and carrying more granite, which is likely to split it. In the 3d level, west of Crosby's cross-cut, the lode yields a little lead, but not enough to value; the ground has slightly improved. The toughness of the air compels us to suspend both the 2d level east and the same level west of Swaffield's shaft for the present.—Shafts and Winzes: No change has taken place in Taylor's engine-shaft, sinking below the 6th level; the shaft is still off the lode. The sinking of La Magdalena shaft below the 5th level has been resumed; we hope soon to get down to the depth of a 6th level. The lode in Henty's shaft, sinking below the 2d level, is small and poor. Nono's winze, below the 5th level, yields ½ ton of ore per fathom; the lode is very open, and yields a little lead.

**PORTUNA.**—Aug. 16: Canada Incoima Mine: In the 120 fm. level cross-cut, north of O'Shea's shaft, we expect to cut the lode by the end of the month. The ground in the 110, west of O'Shea's shaft, still continues hard for driving. Nothing has been done in the 110, east of O'Shea's shaft, since last report, the men being engaged in stopping the bottom of the shaft. The 100, west of Henty's shaft, yields ¾ ton of ore per fathom; the lode is looking a little better than it was. The 90, west of Judd's, is suspended for the present. In the 80, south of Henty's, the air being bad we are obliged to put in pipes from the 80 west; we hope by so doing to be able to get on better with this driving. The lode in the 50, east of the shaft, is large and kindly, producing ¾ ton of ore per fathom. The lode in the 90, east of Addis's shaft, is large, producing good stones of lead ore occasionally. The 80, west of Lowndes' shaft, yields 1 ton of ore per fathom; the lode still continues to open fairly productive ore ground. A change has taken place in the ground in the 80, east of Lowndes' shaft, and from its appearance we expect to cut the lode shortly. The 70, east of Santo Tomas shaft, yields ¾ ton of ore per fathom; the lode is small, and from what we have seen in the level above we cannot expect much. The 60, west of Santo Tomas shaft, is communicated with the 70. Fair progress is being made in sinking San Pedro shaft below the 50. Segure's winze, below the 70, is worth 1½ ton of ore per fm.; this winze continues to go down in a good

lode. In Burgos' winze, sinking below the 70, good stones of lead ore occasionally found.—Los Salidos Mine: The lode in the 110, west of Morris's engine-shaft, still continues small and valueless. The 101, west of Buenos Amigos shaft, produces ¾ ton of ore per fathom; the lode is not quite so good as it was, but the ground is somewhat easier for driving. The 90, west of Buenos Amigos shaft, is worth 1½ ton per fathom. There is no change to notice in this end since last report. The 75, west of San Carlos shaft, produces 1 ton of ore per fathom. We have put a new party of men in this end, and hope to get on more rapidly with driving; the lode looks better. In the 110, east of Morris's engine-shaft, the lode is very small and poor. The 100, east of Cox's, yields ¾ ton per fathom; there is a good lode in the upper part of the end, but downwards it is not so good. The 90, east of San Pablo's shaft, continues to open out well; it is now worth 3 tons per fathom. The 25 east and the 25 west of Palgrave's engine-shaft each yields 1½ ton of ore per fathom; there is not much change to notice in these ends, the lode in each being regular, compact, and solid.—Shafts and Winzes: Buenos Amigos shaft, sinking below the 100, yields ¾ ton of ore per fathom; the lode is still small, and the men are getting on fairly with sinking. We hope to communicate Nuto's winze with the 90 this month. Topeto's winze is worth 3 tons per fathom; this is holed to the 100. Castelar's winze, below the 65, yields 2 tons of ore per fathom; the lode is compact and solid, and the men are getting on well with sinking. The stopes throughout the mine are looking much as usual. The machinery is in good working order, and all surface operations are being carried on with the usual regularity. We estimate the raisings for August at 350 tons.

**HOLLOWAY'S PILLS AND OINTMENT.**—SUMMER AILMENTS.—Vicissitudes of temperature, extreme heat, and indulgence in fruit, are now producing diarrhoea, dysentery, and cholera. In the early stages of these diseases the public possess in Holloway's remedies a grand specific, which can be applied internally and externally, with the certainty of checking the intestinal irritation. None but the imprudent and reckless will disregard the admonitory symptoms of these often fatal diseases. In the hot weather their course is soon run, and unless adequate means be adopted, death is the fearful penalty of neglect. To children and young people these medicines are a boon indeed, for they arrest disease without inflicting injury to the most feeble constitution. They purify the blood and give the delicate better health.

EVERY INVESTOR AND CAPITALIST SHOULD APPLY FOR A PROSPECTUS OF

# The Geifron Mining Company, Limited,

THE VAN DISTRICT,

LLANIDLOES, MONTGOMERYSHIRE.

Established for working the well-known Geifron Mine, on the Van lode, which has hitherto made such large returns, and is recognised as the great lode of the district. This property is held at a royalty of 1-16th of the produce.

Incorporated under the Companies Acts 1862 and 1867, which limit the liability of the shareholder to the amount of his or her shares.

NOMINAL CAPITAL, £32,000, IN 6400 SHARES OF £5 EACH.

Deposit, 10s. per share on application, and £1 on allotment, and the balance, if required, at intervals of three months, not exceeding 5s. per share, of which due notice shall be given.

## DIRECTORS.

Lieut.-Colonel CROFTON, Montpellier Villas, Brighton.

W. ST. AUBYN, Esq., 17, St. Swithin's-lane, E.C.

WILLIAM CREMER, Esq., 11, Brunswick-road, Brighton

(With power to add to their number).

BANKERS—THE ALLIANCE BANK, LOITHBURY, E.C.

SECRETARY—HENRY YEATES, Esq.

OFFICES,—85, GRACECHURCH STREET, E.C.

This company is formed for the purpose of purchasing and working the celebrated Geifron Mine, well known and recognised as the most legitimate mineral ground in the Van district. In addition to the Van lode, they have the Geifron lode traversing the sett and forming a junction. In consequence of the war, lead has gone up in value £2 per ton, is in great demand at this advance, and is less liable to fluctuations in price than any other metal. It is a well-known fact that the paying lead mines in Wales average nine or ten to one as against those of Devonshire and Cornwall. The advantages of working mines in this district are very considerable, as the mountains containing lead have the levels, in most instances, high and dry, and are, therefore, worked at little cost, whereas in Cornwall the ponderous and extravagant machinery tires out two-thirds of the adventurers before they get to the mineral.

This mine has been working for a considerable time, the proprietors having cleared up the levels and timbered the ground, in order that it may be fairly inspected, and laid before the public as a bona fide investment.

During the former working of this property it was stated there were sales of from 50 to 60 tons of ore per month, realising over £18 per ton. £10,000 has already been advanced and expended on the mine, and there is ample water-power from the Severn for pumping and all other purposes. The facilities for transporting the ore are very great, the mine being about four miles distant from Llanidloes Railway Station; in the previous working they had to transport the ore to Aberystwyth, a distance of fully 35 miles, at a cost of £2 per ton. The lodes, as proved at all the points of operations, are prolific and metal-bearing. The strongest opinions from undeniable authorities point to the Geifron as the great mine of the district, especially as the junction of the lodes takes place there, and it is at such a point that a practical miner looks for the great deposit of ore.

The mineralogical stratification and geological position of this mine are everything that could be desired; and it is the current opinion of practical men and geologists, thoroughly acquainted with the district, that this property, being worked by a spirited company, cannot fail to give considerable profits, equal to, if not in excess of, the Van Mine.

An advantageous agreement has been entered into with the vendors for the purchase of this valuable property, dated 23rd June, 1870, and is made between Wm. Cremer, Chas. Rule, Bridges, Carmichael Hooke, George Eyraud Hooke, and John Pengelly Edean of the one part, and Mr. James Collins, the Secretary on behalf of this company, of the other part; the particulars of which may be seen at the office of the company. So confident are the vendors of the value of the mine that they have agreed to accept shares for their entire interest, which is a feature in the undertaking that no mine in the Principality, started as a public company, has hitherto laid before the public.

The directors, believing in the principle of limited liability, have adopted it, feeling assured that this course will be appreciated by the shareholders, and they feel confident that they are inviting investors to subscribe to a bona fide property.

Shareholders desirous of paying up the whole £5 at once will be at liberty to do so, and receive 5 per cent. discount in respect of such fully paid-up shares, which shares can, under no possible circumstance, be subject to any future call or liability.

Share warrants to bearer will be issued under the provisions of the Companies Act, 1867, which pass from hand to hand like a Bank note, and by which all trouble and expense of making and registering transfers will be avoided.

The following extracts of reports from eminent geologists and practical mine agents of the highest standing in England, well known in mining circles, will explain fully the present position and future prospects of this undertaking.

Prospectuses, plans, &c., may be had on application to Mr. YEATES, at the offices of the company, 85, Gracechurch-street, London, E.C.

## EXTRACTS FROM REPORTS UPON THE GEIFRON MINE.

I have made a thorough examination of this remarkable mine, and had I not known the apathy and supineness of the Welsh miners should have been surprised to find such a splendid lode. The principal lode is, I believe, the great Van lode; it is on the exact strike of the celebrated vein, and presents appearances which fully warrant the idea; the sett is in close proximity, and has also the advantages of being surrounded by mines, including Pen-y-Glyn, Aberdunant, and other partially proved and favourite properties. The lode is of unusually large size, is well defined, and proved to be rich for copper in the backs and upper levels, with lead and blende ores coming in as the depth increases, a fact in perfect consonance with the circumstances of many of the richest lead mines that have been worked in the clay-slate formation, as at the Laxey Mine, in the Isle of Man, and those in the East Wheel Rose district, in Cornwall, where lead ore is invariably found beneath such upper deposits. A considerable amount of ore may be procured in your stopes and in prosecuting your levels into the hill, when you will have extensive backs, and doubtless you will soon have parcels of lead and copper ores for the market, irrespective of discoveries to be made in depth. There are several parallel and easterly lodes that run through the entire sett, and in the western part of the mine form junctions with the main lode; such circumstances can hardly be over-estimated. The strata are clay-slate or cambrian, traversed by elvan and sparry cross-veins, and highly mineralised with iron pyrites, oxides of iron, carbonates of lime, and the lodes are rich in gossan—in fact, contain all the elements to constitute a great and lasting mine. The ground in the neighbourhood of the principal lode appears to be saturated with mineral in solution, the walls of the vein being covered with oxides and carbonates to a very unusual degree, and present a beautiful green appearance. The floor or sole of the old level has yielded a quantity of carbonate of copper, which has been saved, and is now at the mouth of one of the adits, where also are some piles of good copper ore for dressing. I should advise this strongly impregnated solution be saved for the purpose of precipitation, as at Parys Mountain, Alderley Edge, &c., as I am persuaded it will pay well to do so. The copper ore is of the rich yellow and peacock character, together with black oxide. I have heard it stated that when the mine was last wrought, by the imperfect modes alluded to, as much as 30 to 50 tons of copper per month was sold at £20 to £25 per ton. After examining the backs and produce of the Geifron Mine I can easily believe it, and that by present scientific appliances that amount may be indefinitely increased. All you have to do to make large profits is to sink your mine as they have done at the Van, and extend your levels. The lodes are such as to warrant the most sanguine hopes of a great success, if appearances, analogy, and a good locality be deemed preliminary worthy of consideration. I may briefly sum up my report by saying you have them all in the Geifron, and that they may be cheaply and easily developed and taken advantage of—in fact, the undertaking can hardly be deemed a speculation, as it is really an investment.

GEORGE HENWOOD, Mining Engineer.

I have known the above mine and the large tract of ground included in the company's grant for more than 20 years, and am well acquainted with the underground workings and the circumstances under which the works became abandoned some few years ago, and these were wholly exceptional, having no reference whatever to the merits of the adventure, but arising solely from the sudden

death of the largest shareholder, and the circumstances that sprang therefrom. At this time the returns of copper were considerable, and ranged for a long period at from 20 to 30 and up to 50 tons per month, worth £25 per ton. In the bottom of the deep adit level there are two sinkings in the ore, to a depth of from 10 to 25 fathoms, from which large quantities of ore were raised. There are other points in the lode wrought to an inconsiderable depth below this adit level also productive, and in all these workings and sinkings the lode is still productive, and became suspended in consequence of having no pumping power to drain the water. Above the adit level the ore is chiefly taken away, and the shafts, or pits, of ore will be met with. I consider that you will find the lode unwrought, but in the partial operations effected in the vein is found to be highly crystallised, containing large quantities of carbonate of lime, quartz, and charged with mineral, very similar in character to the other lead lodes traversing the district. The company's grant contains also other lodes, and there are many features interesting to practical miners as yet unproved. A water-wheel of 40-ft. diameter will drain the mines to a depth of fully 100 fms., and there is a never-failing supply of water, thus avoiding the heavy outlay and expense of several adits. As far as I could see and judge of the workings, I come to the conclusion that there must have been good returns of copper made, judging from the quantity of ground worked away in the backs of the No. 3 level, or deep adit. A cross-cut is driven for 52 fms. in a northerly direction, and is intersected by a very kindly lode, bearing nearly in an easterly and westerly direction; underlying south from the end of this cross-cut the lode has been driven upon easterly for about 250 fms. Judging from the good character of the lode at surface, east of the deep adit, it gives me every reason to believe that other good shocks, or pits, of ore will be met with. I consider that you will find a back on the No. 3 level of at least 70 fms., all dry; therefore, it is necessary that driving of this level be carried on with all speed. The levels No. 1 and 2 should be communicated down from No. 2 to No. 3, or deep adit, level forebore. I could not enter them, but the old miners informed me that ore could be raised at once that would pay for working, and leave a profit. In the No. 3, or deep adit level, at the point where the cross-cut intersects the lode, there is a winze sunk to the depth of 10 fms., which is full of water. The old miners informed me that the lode was cut at the bottom, and contained ore to a depth of 400 fms. to the east upon this level, there is a winze sunk to the depth of 20 fms., upon the course of the lode; this was done by hand-pumps. Good copper was left standing, and improved going down. I should consider this lode to be the same as in the Aberdunant, Van Consols, Pencyn, and Van Mines, the whole of which have proved productive.

JOHN REYNOLDS.

I have carefully examined the above mine both at surface and underground. This mine is situated west of Aberdunant, and is unquestionably on the same lode that has proved so abundantly productive in the now celebrated Van Mine. I was not prepared for seeing such a fine masterly lode, containing all the elements conducive to a great and profitable mine, so little wrought upon. A level has been driven on the course of this lode about 6 fathoms, where it is again cut through, at which point it is 24 feet wide, and contains the same indications of early productiveness. The most interesting point is about 400 fms. to the east upon this level, there is a winze sunk to the depth of 20 fms., upon the course of the lode; this was done by hand-pumps. Good copper was left standing, and improved going down. I should consider this lode to be the same as in the Aberdunant, Van Consols, Pencyn, and Van Mines, the whole of which have proved productive.

S. M. RIDGE.

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JOHN KITTO.

The deep adit we have cleared and restored for upwards of 100 fathoms on the course of the lode, and with a little further cut we shall clear it up to the end which is under the highest part of the hill, being about 80 fms. from surface. I find that in several places the backs are stoped extensively, and the lode generally has a very strong and kindly appearance. In one place we cleared up an old sink, and discovered a lode which will produce one ton of copper ore per fm. No. 2 Adit: This level is now chiefly restored, which is about 130 fathoms on the course of the lode. From the end we are now driving a cross-cut south to intersect the south part of the lode. We have driven about 7 fathoms and are expecting to reach it every day. About 30 fms. behind the end we have sunk a winze about 7 feet in a lode bearing a strong character, producing good stones of lead, and about 1 ton of copper ore per fathom. We have also stoped a piece of ground in the old workings which has produced some good copper ore, black and yellow. About 20 fathoms from the long cross-cut leading from the mouth of this level we have put up a rise about 4 fathoms through a very strong lode of carbonate of calcium, with lead and copper intermixed. We have also made a footway from this to the 15 fm. level.—The 15 fathom level: This is midway between the deep adit and the No. 2 adit. A great deal of ground is stoped entirely between this and the deep level, as well as to the level above. Where the lode is standing it is large, and has a very kindly appearance, and near the end it is thickly disseminated throughout with spots of lead. No. 3 adit we have cleared out, and have driven 1 fathom in a very large gossan lode, producing good stones of copper ore. By the plan and section which I have sent, you will see that we have now 80 fathoms of backs above the adit, an advantage rarely met with. When it may be necessary to extend operations below the deep adit level, we have only to communicate the engine-shaft, which was sunk by the old workers for that purpose, and is now in good condition. The advantages which this mine possesses can scarcely be over-rated; its geological position, its beautiful clay-slate stratum, its strong masterly lode, and its never-failing stream of water, combine to enhance its value. Taking everything into consideration, I believe this mine, when properly developed, will prove a great source of mineral wealth.

JNO. ROBERTS.

Geifron Mine, August, 1870.—The cross-cut north from the No. 2 adit is 4 feet through a very strong lode, containing copper and sulphur, and now looks so promising that I hope in a few days to be able to report a discovery.

HENRY FRANCIS, Manager.

Geifron Mine, Aug. 11, 1870.—I beg to state that the cross-cut driving north from end of second adit contains a very strong lode. The end to-day is more porous than it has been, and there are other indications that we have a good deal more lode before us, and to all present appearances of a favourable character.

HENRY FRANCIS, Manager.



**BRITISH MINES.**

*(continued)*

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at 31. 10s. per fathom, worth 6l. per fathom. Our pay and setting passed off very satisfactorily.

**NORTH POOL.**—Aug. 25: In the 24 east two stops in the back will produce 2 tons of copper ore per fathom, accompanied with good tinstuff. No other change to report. We are erecting a new whim upon Ballarat shaft. We have 11 tons of good copper ore ready at surface, and about 4 tons underground broken, which we cannot draw up until the whim is complete. The 40 tons of tinstuff has been offered for sale.

**NORTH ROSEAR.**—R. Goldsworthy, R. Angove, Aug. 23: We have taken down the lode in Doctor's shaft, which we found about 5 ft. wide, producing occasionally fine stones of copper ore. The men are now put to drive the 250 east; as soon as we have driven about 12 or 14 ft. we shall ease and divide the shaft from the 240, down, and commence driving west also. The lode in Bryant's shaft still maintains its former size and value—2½, per fathom for the length of the winze. The lode in the 240, west of Doctor's shaft, is 4 ft. wide, worth 10l. per fathom. The lode in the 230, west of Doctor's shaft, the lode is full 5 ft. wide, producing tinstuff of low quality. The winze sinking in the bottom of this level is still poor. There is no change to notice in the 140 fm. level cross-cut south from wheel Seton. All our tin stops throughout the mine continue much the same as when last reported. We sold on Friday last 37 tons of arsenic, for 133l. 4s.

**OKEL TOR.**—W. B. Collom, Aug. 25: The stopes in the back of the 50, on the north lode, will yield 3 tons of ore to the fathom. The lode in the east, on the north lode, the large mure and muddle has split out, and another splice is making at present, will yield 6 tons of ore and muddle to the fathom. In the 80 east, on the north lode, the driving is on the north part of the lode, which is being carried for 5 ft. in width. Various assays for tin have been made from this lode, one of which has made a produce of 5 quarters of tin to the ton of lode-stuff; another three quarters of tin to the ton; and from the lode on the south side of the level it produced one quarter of tin to the ton. In the 80 east, on south lode, the level is yielding 1 ton of good quality ore to the fathom. There are seven tribute pitches working for copper ore, which are yielding fair quantities of ore.

**OLD GUNSLAKE.**—F. Phillips, Aug. 24: Now Shaft: The branch I spoke of last week is not so large as then; it seems to be very changeable, and is now about 6 in. wide; the other parts of the lode is standing for the time.—Cross-cut: I think we are nearing the lode, but have not cut it yet; about 4 ft. have been driven.

**PEDAN-DREA UNITED.**—W. Tregay, J. Thomas, Aug. 20: Sump Shaft: Fair progress has been made in sinking below the 140 during the week. In the 140 east and west the lode is worth 14l. per fathom. The stop in back of this level yields 10 cwt. of black tin per cubic fathom; lode 12 ft. wide. In the 120 east the lode is worth 6l. per fathom. In the 120 west, on north lode, the lode is large, strong, and promising, yielding good stones of tin, and letting out much water. We are still driving from the 47, to meet the top of the rise in the 100 east; ground rather stiff.—Cobbler's Shaft: In the 120 west the lode produces a little tin, and lets out much water, promising improvement.—Nash Shaft: In the 90 east the lode is worth 6l. per fathom. In the 90 west the lode is worth 20l. per fathom; 80 east, 6l.; 80 west, 8l.; 70 west, 12l.; 60 east, 20l.; 60 west, 12l.; 55 east, 12l.; 55 west, 20l.; 47 east, 15l. per fathom. In the cross-cut north of the 47 west end we are still intersecting branches producing stones of tin.—Cardozo's Shaft: The lode in bottom of this shaft is worth 15l. per fathom. The pitches throughout the mine are producing their usual quantities of tin, and are looking well for continuance. We sold this day at Bissoe 18 tons 0 cwt. 1 qr. 23 lb. of black tin, for 1320l. 3s. 4d. No other change to report.

**PENHALLS.**—S. Bennett, W. Higgins, Aug. 20: The lode has not yet been cut in the 80 east, but this will occupy a month. The stop in the back of the 70 is without alteration, being worth 12l. per fathom, and the winze below the 60 west is worth from 5l. to 9l. per fathom. The stop in the back of the 50, on the north lode, is now in contact with the south part of the down-rail, and not so productive as it has been. The 50 east is hard and sparry, and the water is issuing freely from it. At Sarah's the 17 west is worth 9l. per fathom. The driving of the 50, west of Glynn, is resumed. The rise above the 10 fm. level, at the flat-rad shaft, is worth 25l. per fathom.

**LEVEL WHEAL.**—A. J. Martin, Aug. 23: The sinking of the engine-shaft below the 130 is now resumed on the course of the south lode, which is of great advantage to us, both in time and expense; we shall push on this point with all dispatch, so as to meet with the junction, where there cannot be any doubt as to the results. The 130 north cross-cut is extended 2 fms. 4 ft. 6 in.; the ground is without change. I strongly urge the desirability of pushing on this cross-cut to intersect and open up on the course of the lode, and I fully believe by so doing we shall make good discoveries of tin. We are getting on as fast as possible in pushing in the whim-engine. Our 60-in. engine and pitwork are in good working order.

**PERKINS BRACH (Shropshire).**—(Telegram). E. Davies, Aug. 26: Walker's vein greatly improves as depth is attained; rocks of solid ore now being got. Have to be broken before they can be raised, as some exceed ¼ ton. We shall sample 20 tons shortly.

**PRINCESS OF WALES.**—Thomas Foote, G. Rickard, August 24: We have nearly completed the cutting of the trip-lap at the 50. There is no change to report in the cross-cut driving north at the 50. The lode in the end of the shaft at this level is composed of peach, spar and muddle, and in places producing stones of ore.

**QUEEN.**—Wm. Knott, Aug. 23: The ground in the cross-cut south at the 20, below adit, continues favourable for driving, and of a very congenial character for mineral. In the 30 fm. level, east and west of Cook's shaft, no lode has been taken down the past three days, but when last taken down was much of the same size and character as last reported—worth 8l. and 12l. per fathom.—Silver Department: Paul's winze is being sunk, and we have broken from it 2 ft. below the level. The lode in this winze continues to present very promising appearances, and is yielding some good saving work, and from which we have broken since my last five bags of silver ore of moderate quality.—Bennett's Western Shaft: This shaft is now 8 fms. below the adit, or 10 fm. level. I expected at or about this point we should have discovered the junction of the north lode and south branch, and it would have been reached if the underlie of the south branch had continued as seen in the adit above. The branch of silver in the eastern end of this shaft continues good, and we have broken from it during the past week six bags of silver ore of good quality. I have written Messrs. Sims, Williams, Nevill, and Co. this day respecting the shipment of the two parcels of silver purchased last week by them; and we are preparing two fresh parcels for shipment. The masons are making good progress in the building of the engine-house, &c.

**REDMOOR.**—F. Bennetts, Aug. 25: The lode in the 20, west of the lead lode, is worth 3l. per fathom. The lode in the end, west of the winze, below the adit, is worth 9l. per fathom. The lode in the adit west, is worth 6l. per fathom. The lode in the 10, west of the adit, is worth 10l. per fathom. The lode in the 10, west of the adit, is worth 10l. per fathom. The lode in the 10, west of the adit, is worth 10l. per fathom.

**REPERKY.**—Thomas Parkyn, Aug. 23: The engineers are making rapid progress in fixing the engine, and all other work is being pushed on with all dispatch. The engine-shaft is now down 5 fms. below the 15, and I have eight men employed in sinking the shaft, working six-hours core night and day. We have had some rich leaders of tin falling into the north lode, and I am of opinion that we shall find rich work for tin that we had at the 15, as several droppers of tin have fallen into the north lode. I think we are getting near the south lode, as we have more water coming from the south end of the shaft. There are two or three other lodes we shall cross-cut when we get down to the 25, which will be in five weeks' time; we are sinking 6 ft. a week.

**RHYDALLOG (Silver-Lead).**—Special Report: Like many other properties dependent upon water-power, this mine has during the past few months suffered from the drought. The underground operations have for a time been limited, but considerable progress has been made at surface, the erection of the large pumping-wheel has been completed, the pumps dropped into the shaft, and all other works necessary for draining the mine to the lowest depth have been carried out. The smithy, carpenter's shop, store-house, and office are in course of erection, and will be finished in a few days. The small wheel is erected, and the drawing-machine will shortly be on the mine, when the whole of the works will be carried on by water-power. The 17 has to be driven into the mountain about 30 fathoms further than the present end to reach the junction of two lodes, both of which have proved productive at and near to the present end. The point of intersection the depth from surface is about 30 fathoms, but in driving the level further into the mountain it will leave back at least 50 fathoms, the advantages of which can scarcely be estimated, as four lodes of considerable width and known productiveness traverse the sett, and pass into the mountain in a westerly direction, one of which—the Llanfair lode—being the richest silver-lead lode in the district, producing nearly 90 oas. of silver to the ton of ore. The lodes in this company's property are of considerable width, and highly productive of silver; they pass through the entire length from east to west, forming junctions with each other within its limits. The machinery is worked by a brook, which passes through the centre of a sett, and by a river, which forms the boundary on the south-east side, and is of sufficient power to develop the lode to a very great depth. The discovery of this valuable mine was made about 80 years since, but owing to the then existing difficulties in carriage of materials to and from the mine the workings were abandoned. The railway now is within 10 miles, and roads have been made, so that transit is no longer a difficulty to be contended with. The only mines in the neighbourhood that have been worked have been so to great advantage, and the owners have received large profits from them; the stratification and lodes of which are identical with this property, and exhibit all those appearances which indicate the produce of mineral in quantity and richness.

**ROARING WATER.**—H. Thomas, Aug. 23: We have not done much here in this mine during the past week, in consequence of want of water to work the wheel. I cannot report much progress for the last week, but I can assure you there is a good lode at the 45, west of Gillman's shaft.

**ROCHE CONSOLS.**—T. Parkyn, Aug. 25: In sinking a new shaft north of the lodes we have been making on we have made a splendid discovery in coming on a new lode, which is rich for tin. The new lode is 4 ft. wide, and the men are sending up large rocks containing rich work for tin. This is a most important discovery, and will greatly enhance the value of the mine. With this new lode, and the other three lodes already laid open, you have immense quantities of rich tinstuff available for the stamps, and you have a valuable mine here. I am pleased to inform you that tin is raised 2l. per ton, and another rise of 2l. more is expected to-morrow, which will make present price for best tin 8l. per ton—a good price.

**ROSEWALL HILL AND RANSOM UNITED.**—J. Daniel, S. Uren, Aug. 24: The lode in the 110, driving east of Ransom shaft, is 18 in. wide, worth 5l. per fathom. The lode in the 100, driving east on the north part, is 9 in. wide, saving work. The lode in the 100, driving east on the north part, is 9 in. wide, saving work. The lode in the 100, driving east on the north part, is 9 in. wide, saving work. The lode in the 100, driving east on the north part, is 9 in. wide, saving work.

**SOUTH CONDURROW.**—Joseph Vivian and Son, William Williams, Aug. 18: West Basset Lode: In the 93, west of King's shaft, the lode has increased in size; being now 3 ft. wide, principally floukan and soft quartz, containing a little tin. We purpose driving this level as far west as Vivian's shaft before cross-cutting to the tin lode. In the 81, east of the lode, the lode is 1½ ft. wide, composed of soft quartz, iron, and floukan. In the deep adit level, east of Fraser's shaft, the lode is 1½ ft. wide, producing good tinstuff, with a favourable appearance.—Tin Lode: In the 82 cross-cut south, west of King's shaft, we are still passing through the lode, which is producing a little tin; we think it will not be long

before we shall commence driving east and west, when we hope to be able to report the opening out of a lode equal to that of the levels above. In the 71, west of King's shaft, we continue driving in the granite by the side of the lode. The winze sinking under the last-named level is worth about 30l. per fathom. The 71, east and west of the cross-cut, on the south part of the lode, is worth about 15l. per fathom. The 61 fathom level, west of King's shaft, is worth about 15l. per fathom. The winze sinking under the level is worth about 15l. per fm. The 61 east, on the north branch, is worth about 25l. per fathom. The winze sinking under the 51, east of Vivian's shaft, is worth about 10l. per fathom. The 51, west of King's shaft, on No. 1 branch, is worth about 6l. per fathom. The rise above the 51, east of King's shaft, on No. 1 branch, is worth about 10l. per fathom. The stopes continue as good as they have ever been.

**SOUTH CONDURROW.**—J. Vivian and Son, H. Abraham, Aug. 25: West Basset Lode: In the 93 fm. level, west of King's shaft, the lode is about 2 feet wide, and easy for driving in. In the 51 fm. level, east of Tye shaft, the lode is 1½ ft. wide, of a favourable character, easy for driving through, and producing a little tin. In the deep adit level, east of Fraser's shaft, there is a lode 1½ ft. wide, having a very favourable appearance, easy for driving through, and composed of tinstuff of moderate quality, making it worth about 5l. per fathom. In the 51 fm. level, west of King's shaft, there is no alteration since last week's report. In the 71 fm. level, west of King's shaft, we are still driving in the granite by the side of the lode. The winze sinking below the last-named level is worth about 25l. per fathom. The 71 fm. level, east and west of the cross-cut, on the south part of the tin lode, is worth about 15l. per fathom. The 61 fm. level, west of King's shaft, is worth about 10l. per fathom. The winze sinking under the last-named level is worth about 15l. per fathom. The 61 fm. level, east, on the north branch, is worth about 15l. per fathom. The rise over the 61 fm. level, west of King's shaft, is worth about 15l. per fathom. The winze sinking under the 51 fm. level, east of Vivian's shaft, to communicate with the rise last referred to, is worth about 10l. per fathom. The 51 fm. level, west of King's shaft, on No. 1 branch, is worth about 5l. per fathom. The stopes, on the whole, are much the same as they have been for some weeks.

**SOUTH DAREN.**—J. and W. H. Boundy, Aug. 23: The different bargains throughout the mine continue without any change to notice since the last report. We are pushing on with the dressing as fast as we possibly can. A full report shall be sent you next week.

**SOUTH MERLLYN.**—Aug. 26: I have no alteration to report since last week. The mine continues to look well, and producing the same quantity of lead ore previously reported.

**SOUTH VAN.**—James Richards, Aug. 25: We should have been in readiness to resume the sinking of the shaft ere this if the work from the foundry had been completed. However, this obstacle will be obviated in a day or two, when sinking shall be put in order to get to the bottom of the shaft.

**SOUTH WARD.**—T. Foote, Aug. 24: Our progress in sinking Thomas's engine-shaft was first-rate during the past week. We have passed through a floor about 12 in. thick, composed of quartz, lime, and muddle, heavily charged with the latter. We have also a splendid wall going down perpendicular the western hill of the shaft, quite a specimen to look at, being nearly covered with muddle. I calculate the shaft will be down by Saturday 14 fms. 1 ft. below the 10 fm. level, and I have no doubt but what the shaft will be down and lode cut at the 25 fm. level by the time I stated in my reports for the past two meetings. Better looking ground for lead I have never seen.

**TAMAR VALLEY.**—J. Goldsworthy, Aug. 35: In the 31, driving south of the western engine-shaft, the lode is 2 feet wide, composed of horn, fluor-spar, muddle, and prlan, and produces occasional stones of rich silver-lead ore. The driving will be suspended for the present, to admit of a rise being put up in the back, were we anticipate on opening up good ore ground, and procure good ventilation. In the 27, driving south of western engine-shaft, the lode is showing favourable indications of an improvement. The tribute pitches throughout the mine are producing their usual quantities of tin and lead ore.

**TANKERVILLE.**—Arthur Waterhouse, Aug. 25: There is no change in the prospects of the mine since my last report. Watson's shaft is down 5 fms. 2 ft. below the 92, and is yielding its usual quantities of lead ore. The stopes throughout the mine never looked better than to-day. The new engine-shaft, from surface, is going down favourably. Our engines are all working well. We sold 75 tons of lead ore yesterday, at 13l. 10s. 6d. per ton, and shall sample a similar quantity on Wednesday next. We have had just rain enough to sprinkle the dust, nothing more.

**TREWETHA.**—T. Foote, Aug. 24: The ground in the deep level is still favourable for driving. All departments of the works are working and progressing favourably; we are gradually laying the floors and increasing the machinery for the dressing department, which is much required for the stamps now at work. That we have a vast extent and quantity of productive tinstuff, and which can be delivered into the stamps to great advantage, is being daily made positive and certain; and I only require ample stamping machinery, dressing floors, and appliances to enable me to make very large monthly returns of tin. I believe that, if not stopping in quantity and quality in mine the country.

**TREWETHA.**—T. Foote, Aug. 24: We have sampled this day a parcel of ore, computed at 35 tons. Tenders to be sent at your office on or before the 29th inst.

**VAN CONSOLS.**—T. Corfield, Aug. 25: In the 30 fm. level end, going east towards the barytes, we have occasional stores of lead, but the composition of the lode is much the same as it has been for some time. We have had some rain, and are now able to draw stuff from the western shaft. At Little's shaft sinking is going on very well; we can go down at the rate of 5 or 6 ft. per week. In Gundry's shaft, we hope to have the water cut off by to-morrow morning; we shall then be able to resume operations at this point.

**VIRTUOUS LADY.**—H. Horswill, Aug. 24: We have let down the water from the 24 this morning, and shall now be enabled to examine the lodes, and ascertain at what depth they will be intersected in the shaft, the sinking of which will be immediately resumed. There is no change to notice in the character of the ground in the cross-cut south, either for progress or mineral. The lode in Metherell's level and stopes, west of Screen shaft, has much improved since last report, and is now yielding a good quantity of tin. In fact, it has never been so productive since we commenced as it is at present, and looks as if it would turn out a large quantity of mineral. In the south adit level east the lode continues large, producing gossan, prlan, and stones of black ore, everything about it indicative of a deposit of copper ore. Dressing operations pushing on as fast as possible.—Tin Lode: In the open cutting the lode continues large, composed of capel and tin work for the stamps. The engine-shaft is in order to receive the pitwork, the wheel-pit is excavated, and stone sufficient for building on the spot. The water-course is completed, and the lode will be finished this week.

**WEST BASSET.**—T. Foote, Aug. 24: We have no change of importance to report this week. We sample to-day 240 tons of copper ore.

**WEST CARADON.**—W. Johns, N. Richards: Marina's Shaft: Clymo's lode, in this shaft, is about 1 ft. wide, and spotted with ore. The 55, west of cross-cut, on Allen's lode, is a little improved, worth close on 1½ ton per fathom. The 55 east, on this lode, is worth 2 tons per fathom. The winze in the bottom of the 42, before this end, is worth 2 tons per fathom. The 42 east is worth 1 ton per fathom. The 42 west is poor. The ground in the 42 cross-cut south is favourable for driving. The building of the new whim engine-house is in a forward state.

**WEST CWM ERFIN.**—Aug. 22: The lode in the adit level, going east of engine-shaft, is 4 ft. wide, and of a very promising character, containing strong spots of lead and copper ores. At the cross-cut going north from the adit level, east of engine-shaft, the ground continues hard for exploring, and a good deal of water is issuing from the forebreast.

**WEST ESKAIR LLE.**—R. Harvey, Aug. 25: Owing to the heavy rains of late we have not been able to get down the shaft, and we hope to have the water cut off by to-morrow the latter part of the week, when we shall be able to resume the driving of this level south to intersect the south lode, which shows such extraordinary good indications at surface. This level will intersect the lode at least 50 fms. from surface. This I think a very important point, and it shall be pushed on with all speed. I have no alteration of importance to speak of in No. 1 cross-cut, east of old workings, but the indications are still everything that could be wished for.

**WEST LODOLPHIN.**—John Pope, Jun., Aug. 24: Lloyd's shaftmen and Pressure shaftmen are making good progress in cutting down the shafts below the shallow adit levels. The lode in the deep adit level, driving south-east of Pressure shaft, is 1 ft. wide, worth about 2½, per fathom. The lode in the deep adit level, driving east of counter, is improving in appearance—9 in. wide, worth about 3l. per fathom. The lode in the deep adit level, driving east of Salt's shaft, is 1 ft. wide, producing a little tin, but not sufficient to value. The work at surface is being pushed on as fast as possible, but I should think it would take the masons about two weeks more to get up the walls of the engine-house; there are, however, working very busily about it.

**WEST GREAT WORK.**—S. Reed, Aug. 25: We have just cut the Treacow Moor lode, at the 10, east of the main cross-course, where the lode has been hove 6 feet, it is 2 feet wide, and worth for tin 18l. to 20l. per fathom. The lode in the 20, east of the western flat-rad shaft, is 1½ foot wide, worth 13l. per fathom. The winze from the 10 to the 20 has been communicated, and we have now good ventilation. The men have completed the fixing of tramway in the 30, west of Harvey's shaft; the lode in the end is 3 feet wide, worth 8l. per fathom. The 20, driving west of Harvey's shaft, on the great north-lode, is 2 feet wide, open, and containing good tin. We have cut branch 4 in. wide, containing good stones of tin in the cross-cut towards Oola lode.

**WEST JEWELL.**—J. Mayne, Aug. 25: In Greene's engine-shaft the men are progressing satisfactorily, clearing it and securing it on the course of the lode. In Sir Frederick's shaft the lode is much the same—tinny throughout, but a considerable increase of water. In Freeman's shaft, sinking below the 17 fathom level, the lode is worth 10l. per fathom. In the 17 fm. level, driving west, the lode is worth 12l. per fathom. In the 17 fm. level east we have cut the lode east of Olgers cross-course; it is producing good stones of tin. We have not driven far enough to be off the influence of the cross-course. In a new pitch set in the back of the shallow adit, within 2 fms. of Greene's shaft, the lode has improved, and is now worth 25l. per fathom for tin. All the other pitches are looking much as usual. There is no alteration in any other part of the mine.

**WEST MARIA AND FORTESCUE CONSOLS.**—W. Skewis, Aug. 25: West Maria Lode, Willeford's Shaft: The lode in the 71 fm. level east is worth 30l. per fathom. The lode in the rise in the back of this level is worth from 30l. to 35l. per fathom. No change to notice in the western end of this level. The lode in the 69 fm. level, east of the cross-cut, is now worth 18l. per fathom, and looking promising for a still further improvement. The lode in the stopes in the back of this level is worth—No. 1, 20l. per fathom; No. 2, 30l. per fathom; and the stopes in the bottom of this level, west of shaft, is worth 15l. per fathom. No improvement has yet taken place in the 60 fm. level, west of Maria engine-shaft. The lode in the 50 fm. level, east of Willeford's shaft, is worth 15l. per fathom. No important change has yet taken place in the lode in the bottom of the shaft.

**WEST ROSEDOWN.**—J. Truscott, Aug. 25: I beg to hand you statement of our monthly setting, and ground measured for the past month. The 90 to drive west on Rosedown lode, 2 fms. stent, by four men, at 7l. per fathom, measured 2 fms. 1 ft. 6 in.; the lode is about 1½ ft. wide, composed chiefly of quartz, intermixed with muddle and spots of copper ore. The 80 to drive west on Rosedown lode, 2 fms. stent, by four men, at 10l. per fathom, measured 1 fm. 4 ft., producing a little saving work for copper. The 85 to drive the cross-cut north, 3 fms. stent, by six men, at 10l. per fathom, measured 2 fms. 5 ft. 6 in. The 75 to drive the cross-cut north, 2 fms. stent, by six men, at 11l. per fathom, measured 2 fms. 1 ft. 6 in. The 70 to drive the cross-cut south, 2 fms. stent, by six men, at 15l. per fathom, measured 1 fm. 1 ft.; there is now a little water issuing from this end, which indicates our nearing a branch or lode.

**WEST TANKERVILLE.**—A. Waters, Aug. 25: Wood Vein: We have dropped 8-in. drawing-lift 21 fms. below the adit, and shall have everything in readiness to start the engine to pump out of the old mine on this day week. The said

length of pumps will put us down to the 15, where the Laurence's got such large quantities of ore.—California: The shaftmen having finished securing brow and cutting pit at upper adit, are now opening ground for angle-bob.—North Boundary Lodes: A shaft new in this part of the mines for some time past.—South Boundary: The new shaft is down 14 fms., ground continuing favourable for progress. The masons are getting on well with loading for new engine. The new boiler is on the ground, and the engine being sent to the mine. We are making tram-road to dressing-floors, and getting out foundations for passes, crusher, &c.

**WEST WHEAL TOLGUS.**—August 23: Taylor's shaft is now nearly down 11 fms. below the 105 fm. level, which completes the last stent set. About Friday next we hope to set the level to make to the west end of the shaft for the tramroad, opposite the intended cross-cut to the lode, which will not take long to do. After that is completed we purpose carrying down the bottom pit with the shaft; at the same time we shall drive the cross-cut with (say) four men. We must take care not to cut the lode before the shaft is deep enough for a cistern to fix the standing lift in. We are hastening on the work in this shaft as fast as possible. Richards' shaftmen have eased and divided down the shaft, and nearly completed the driving east for pit, &c., and to-day the kibble has been drawing from bottom (65 fm.) level, and to-morrow the men will begin to cross-cut north and south. The lode in the 105 east and east 12 ft. wide, with a little ore, but hardly enough to value. The lode in the 105 west is 5 feet wide, yielding 3 tons of good ore per fathom. The men have been taking down the side, which is quite as good as we expected, and is altogether a splendid lode of ore. The western rise in the back of the 105 fm. level is just the same as last reported, yielding 10 tons of ore per fathom for 12 ft. long, the length of the way. The eastern rise in the back of the same level is much the same, yielding about 2 tons of ore per fathom. The lode in the 95 east is large and wet, but still poor. The lode in the 95 west is small and poor, with more water. The lode in the 65 end west is 2 ft. wide, with a little ore, but not enough to value. The ground is just the same for driving. The stopes in the back of the 105 west is yielding 3 tons of ore per fathom, worth 4l. per fathom. The lode in the back of the 95 fm. level west is yielding 5 tons of ore per fathom, worth 4l. per ton. The lode in the back of the same level east is yielding 2½ tons per fathom, worth 3l. 10s. per fathom. The lode in the stopes in the bottom of the 85 fm. level east is yielding 4 tons of ore per fathom, worth 4l. per ton. We would remark that the ore in the 105 end west is worth at least 50s. per ton, making the lode in the end worth 50l. per fathom, and this we are sure of.

**WEST WHEAL TREMAYNE.**—S. Roberts, Aug. 23: The lode in the 20 fm. level west, on the south lode, is about 9 in. wide, yielding very rich stones of tin and copper ore, and the ground apparently more congenial for mineral. We think we are near the bottom of Park Toll shaft. We have to-day found ground in both ends of the shaft, but as yet cannot see the lode; the ground is stopped away both east and west to within 3 fms. of surface by the old workers. In order to make this shaft available for drawing it must be cut down a few more feet, with the view of reaching the elvans. It would be advisable to do so as quickly as possible, and communicate this shaft with the 20, on the engine lode, lest rain and winter set in. This shaft is now about 9 fms. in advance of the 20. I would advise a speedy exploration on these lodes towards the great elvan course. If this is pursued it is the unanimous opinion of all miners that great profits will be realised.

**S. Roberts, Aug. 24:** We have just now reached the bottom of Park Toll shaft; the lode is about 12 in. wide, composed mostly of iron, and has a kindly appearance, but have not yet been able to try its worth for tin.

**WHEAL AGAR.**—E. Rogers, Aug. 24: The lode in the 170 is cut into 3½ ft. without any indication of the south wall; it produces good stones of tin, but, on the whole, is not rich as far as seen. I do not expect, however, to reach the best part of the lode for some weeks to come. The improvement in the 140 is looking very well, worth 40l. per fathom. Other parts of the mine just as when reported last week. The water in the flat-rad shaft is all in fork, and daily getting lower.

**WHEAL BULLER.**—James Inch, Aug. 24: Hoeking's shaft is sunk 4 fms. 2 ft. under the 102, through a large lode, which has produced a little tin, but not of much value; set to six men and three boys at 33l. per fathom. The 102 to drive north to six men at 21. 15s. per fathom; if this ground continues we shall shortly reach the north lodes. A winze to sink under the 80 on the cross-courses by two men, at 3l. per fathom; this winze is to ventilate the 102. The 80 to drive west on the north lode by six men, at 14l. per fathom; worth for tin 12l. per fathom. A winze to sink under the level by four men, at 12l. per fm.; worth for tin 15l. per fathom. Stevens' shaft to sink under the 92 by nine men, at 20l. per fathom; this shaft is sunk 8 fms. under the level, and has varied in value from 15l. to 40l. per fathom for the distance sunk, now worth 15l. per fathom. A winze to sink under this level by four men, at 12l. per fm.; worth 8l. per fm. We also set five pitches at an average tribute of 9s. 6d. in 1l.

**WHEAL COURTENAY.**—J. Gifford, Aug. 25: On Saturday we set the cross-cut north, in the deep adit west, to drive by six men, stent 1 fathom, at 8l., subject to stop at any time if required to begin with the wheel-pit. The new shaft is completed to the 115 fm. level, and a cross-cut driven about 3 fms. south, where we have intersected the lode, the value of which cannot be ascertained just yet, as it is disordered a little by means of a gossan; it produces tin, and from appearances we think on opening a few feet east and west a very productive lode will be laid open. In the 106 fathom level, driving west of shaft, the lode is worth for tin 20l. per fathom. In the 106 fm. level, driving east of shaft, the lode is worth for tin 14l. per fathom. In the 94 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 94 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 82 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 82 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 70 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 70 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 58 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 58 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 46 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 46 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 34 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 34 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 22 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 22 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 10 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 10 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom.

**WHEAL GRENVILLE.**—G. R. Odgers, W. Bennetts, Aug. 20: The lode in the 110 east is 18 in. wide, yielding a little tin. The lode in the 100 east is large, and producing tin, and is worth 10l. per fathom. We are hoping that the hard floor of ground we had in the 90 is above, as, if so, we shall make rapid progress towards the course of tin gone below the 90. The lode in the winze sinking below this level (the 100) is worth 6l. per fathom, and which is opening tribute ground. The lode in the 90 east is worth 15l. per fathom. The lode in the rise above the 80 east is worth fully 30l. per fathom. The lode in the 60 east is worth 10l. per fathom. We have not taken down any of the new lode this week, but which we hope to do next, when we shall be fully advised.

**WHEAL KITT.**—(Ss. Agnes).—W. Teague, W. Polkinghorne, S. Davey, Aug. 13: The new shaft is completed to the 115 fm. level, and a cross-cut driven about 3 fms. south, where we have intersected the lode, the value of which cannot be ascertained just yet, as it is disordered a little by means of a gossan; it produces tin, and from appearances we think on opening a few feet east and west a very productive lode will be laid open. In the 106 fathom level, driving west of shaft, the lode is worth for tin 20l. per fathom. In the 106 fm. level, driving east of shaft, the lode is worth for tin 14l. per fathom. In the 94 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 94 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 82 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 82 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 70 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 70 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 58 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 58 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 46 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 46 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 34 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 34 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 22 fm. level, driving west of shaft, the lode is worth for tin 8l. per fathom. In the 22 fm. level, driving east of shaft, the lode is worth for tin 10l. per fathom. In the 10 fm. level, driving west of shaft, the lode is worth



and continues to increase in value as depth is attained. There is everything to indicate Tankerville becoming one of the most permanent and successful lead mines in the world. WEST TANKERVILLE, although not in such a forward state of development, is steadily advancing towards a position that will cause it to be ranked among the best lead mines of this fine district, and I again advise an immediate purchase of the shares. I am only advising others to do what I am doing myself, feeling confident that the time is not far distant when the price of shares will be very different to what it is now, and entirely on the merits of the mine. FRANK MILLS MINE continues to progress favourably, and yields a profit more than sufficient to give the shareholders 2s. 6d. per share quarterly, and yet the shares are at 21. 15s. This is quite an enigma. A more favourable opportunity than the present has seldom occurred to buy into good mining property, paying 10 to 15 per cent. per annum.

**THE TIN TRADE.**—The announcement by the smelters of an advance of 3l. per ton in the Tin Standards (equal to nearly 2l. per ton of black tin) has given great satisfaction, the general opinion being that it will speedily be followed by a rise in the metal, so that consumers will do well not to delay their purchases, in anticipation of a decline. At the present rates the best ores raised in Cornwall will realise about 77l. per ton, while those of inferior quality will range from 71l. to 75l. The prospects as regards the demand for the Welsh tin-plate workers, and the United States generally, are healthy. Many authorities think that the supply of foreign tin is not likely to increase, and a cessation of hostilities would, probably, send up the prices to the point at which they stood at the beginning of July.

**BAR IRON.**—In the first six months of this year, bar, angle, bolt, and rod-iron was exported from the United Kingdom to the extent of 162,748 tons, against 184,297 tons in the corresponding period of 1869, and 138,191 tons in the corresponding period of 1868. To these totals June in each year contributed 33,373 tons, 31,262 tons, and 25,925 tons respectively. The total of 162,748 tons, forming the export for the first six months of this year, was made up thus:—The Hanse Towns, 4022 tons; Holland, 5912 tons; France, 3916 tons; Italy, 15,634 tons; Turkey, 6843 tons; the United States, 21,455 tons; British America, 19,395 tons; British India, 18,308 tons; Australia, 6961 tons; and miscellaneous, 60,302 tons. The value of the exports made in June was 271,002l., against 238,927l. in June, 1869, and 193,405l. in June, 1868; and in the six months ending June 30, 1,298,246l., against 1,378,349l. in the corresponding period of 1869, and 1,042,339l. in the corresponding period of 1868.

**GOLD IN NEW ZEALAND.**—The gold exported from New Zealand during the quarter ending June 30 amounted to 41,164 ozs., valued at 164,000l. The ship Infelix, now nearly due, will bring 435 ozs., valued at 1700l.; but the greater part of the quarter's yield will reach this country through Australia. The Ismay, which sailed on June 21, for London, has on board three bars of New Zealand silver, weighing 364 lb., the value of which is stated to be 2000l.

**LEAD MINES.**—It must be satisfactory to the shareholders in lead-producing mines to find that in less than two months the value of lead has advanced from 2l. to 2l. 10s. per ton. To such mines as the Van, Tankerville, Minera, &c., this increase materially augments the monthly profits. It may be added that Tankerville has just sold 75 tons of lead, at 13l. 10s. 6d. per ton, and another 75 tons will be sampled on Wednesday.

**PLYMOUTH.**—It will be seen by the details of the first general meeting, reported in another column, that the favourable opinions previously expressed with regard to this mine are being rapidly borne out by results. Since the present company acquired the property the most active steps have been taken to develop it upon a more extensive scale, and its general position continues to gradually improve. The "reserves" are already valued at upwards of 20,000l., while the lode at several points is opening out rich. In about five weeks the new 50-ft. water-wheel—to be applied for pumping only—will be at work, and at about the same time the winze from the adit to the 12 ft. level will be communicated, not only giving a large quantity of rich ore ground to work on, but by means of the additional powerful machinery which will be in operation regular and considerable returns and profits will be made. The adit level has been driven for upwards of 150 fms. on a lode averaging at least 1 ton per fathom, and in the present end is 1½ ton. For want of ventilation the driving of this level has been suspended for some time, but when the above winze is communicated to the 12 ft. adit will be resumed, and this, with the driving of the 12, will be constantly adding to the ore ground already opened. The 24 west will also be driven into whole ground to surface, where further important discoveries are looked for, while the same level east will also be driven up to and under the rich lode passed through for the last 18 fms., the 12 east being still worth 2 tons per fathom. After charging the preliminary expenses, the cost of the new wheel and the mine outlay to the end of June, the balance of unexpended capital is upwards of 7000l.—equal to what it was when the present company commenced—showing, even before the new machinery is at work to enable the full returns to be made, the mine almost pays its expenses.

**REPERY MINE.**—During the past week several fresh branches have gone into the shaft, all tending towards the rich south lode. The shaft is nearly 21 fathoms from surface now, and in 4 fathoms more it will be the required depth for the cross-cut. The branches are all of them very rich, and they have now passed nine or ten. Tin has risen 3l. a ton, and with this price it is considered that splendid profits can be made. The fortnightly report of the captain will be found in the usual column.

**EAST LOVELL.**—This mine continues to open out in a most satisfactory manner, and is rapidly increasing its reserves. A "patch of granite" is said to have appeared in the 80—shareholders should recollect that the same thing appeared in the level above the 70, after which the lode materially increased in value. The lode below the 80 maintains its value of 400l. per fathom. The improving character of the lode in the western shaft is properly regarded as an important addition to the permanent value of the mine.

**GREAT WEST CHIVERTON MINE.**—The directors have accepted Mr. Samuel H. Armitage's resignation as manager of the company, in consequence of severe indisposition—which, we regret to state, has terminated fatally. The last full report from the superintending mine agent will be found among the Mining Correspondence.

**PREVENTION OF SMOKE.**—The invention of Messrs. IDLE and NAYLOR, of Dewsbury, consists in an iron flue fixed to the end of a boiler in the form of a rectangular parallelogram 10 in. or 11 in. wide, and about 2 ft. 6 in. in depth, which will vary according to the size of the boiler. The flue is furnished with six dampers and two hinged doors, chains, rods, and pulleys, with which it is worked, and as shown on drawings. Supposing the left hand door be opened for fuel, and being closed again the damper opens at the same time, and receives the newly-made smoke after it has passed northward up the flue of the boiler, it then passes along the end of the flue westward, thence up the south ward side to a damper; it then enters the iron tube or flue at the west end, and passes through another damper into the highly heated fire, where it is consumed.

**SECTIONAL BOILERS.**—The invention of Messrs. W. P. ABENDROTH, J. GRIFFITH, G. W. WENDRAM, and T. H. MULLER, New York, consists in the arrangement of heads provided with openings in their sides, in combination with the horizontal or inclined water-pipes, in such a manner that a side circulation is produced throughout the whole boiler, in addition to the usual up and down or vertical circulation.

**BOILER EXPLOSIONS.**—At the Midland Steam-Boiler Inspection and Assurance Company meeting the directors referred to the action they had taken in regard to the Committee on Boiler Explosions. Consistently with the views which they had always maintained, the officers of the company had, in their evidence, very strongly deprecated Government interference, and urged the Committee to rest content with expressing a decided opinion that inspection was the best means of prevention, leaving it to the employers of steam to provide it for themselves, or to take that provided by such companies as this. It was also suggested that simple means should be adopted for the Government to ascertain whether this was being done, by having concise reports of the facts of all explosions, whether fatal or not. The consideration of the evidence in Mr. Marten's report impressed upon the employers the necessity of showing their willingness to take the responsibility of guarding against explosion without the aid of coercion. Inspection, it was maintained, is the sure remedy for explosion, and it was urged that now, more than ever, steam users should join in the effort begun, and which was at the present time being carried out, by this company, to make Government inspection of steam-boilers totally unnecessary. The Chairman maintained that Government inspection was not called for if steam users would only take care to place their boilers under competent inspection. Such inspection, he maintained, was to their hand in this society, and in that at Manchester. The latter gave a full attention to the boiler by cotton and similar interests located thereabouts, whilst the Midland Company was started chiefly for the benefit of the coal and iron trades. The Manchester Company were no doubt prepared to undertake the care of all the boilers in their district; and this company were certainly ready to perform a similar duty in respect of the boilers used by iron and coal masters anywhere in the kingdom, without, of course, refusing, but on the contrary welcoming, the boilers used in other industries.

With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Joint Meetings of Engineers and Shipbuilders at Glasgow—D. P. Morrison's Paper on the Economical Advantages of Mechanical Ventilation—A. Lupton's Paper on J. G. Jones's Coal-Getting Machine—J. G. Jones's Apparatus for superheating Blasting in Collieries (illustrated)—Metallurgy of Lead (J. Percy, M.D.)—Patent Matters—Original Correspondence: Joint Meeting at Glasgow; Colliery Explosions, and Safety-Lamps; Coal Supply, and Colliery Waste, by G. Ryland (illustrated); Government Mine Inspector for South Durham; Great Western Maritime Ship Canal; Science in Mining; Tin in Quartz and in Elvan; Terras Tin Mine; Mining in the North of Cornwall; "Circular" Speculators, &c.

## The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, AUG. 26, 1870.

COPPER.		IRON.	
Best selected . . . . .	£ s. d.	Per ton.	
Tough cake and tile . . . . .	73 0 0	Bars Welsh, in London . . . . .	7 6 —
Sheeting & sheets . . . . .	75 0 0	Ditto, to arrive . . . . .	7 5 0
Boils . . . . .	76 0 0	Nail rods . . . . .	7 10 0
Bottoms . . . . .	77 0 0	Slag, in London . . . . .	5 0 0
Old . . . . .	63 0 0	Bars, ditto . . . . .	8 0 0
Worra Barra . . . . .	70 0 0	Hoops, ditto . . . . .	8 16 0
Wire, . . . . .	0 10 —	Bars, at works . . . . .	7 15 0
Tubes . . . . .	0 9 11	Hoops, ditto . . . . .	8 2 8
BRASS.		Sheets, single . . . . .	9 10 0
Sheets . . . . .	84d. —	Pig No. 1, in Wales . . . . .	3 15 0
Wire . . . . .	74d. —	Refined metal, ditto . . . . .	4 0 0
Tubes . . . . .	10d. 11½d.	Bars, common ditto . . . . .	6 10 0
Yellow Metal Sheath . . . . .	64d. 7d.	Do. mch. Tynor Tees . . . . .	6 10 0
Sheets . . . . .	64d. —	Do., railway, in Wales . . . . .	7 0 0
SPELTER.		Do., Swed. in London . . . . .	9 5 0
Foreign on the spot . . . . .	10 0 0	To arrive . . . . .	—
"to arrive . . . . .	None.	Pig No. 1, in Clyde . . . . .	2 12 0
ZINC.		Do. f.o.b. Tynor Tees . . . . .	9 6 —
In sheets . . . . .	24 0 0	Do. Nos. 3, 4, f.o.b. do. . . . .	5 17 0
QUICKSILVER (p. bottle) . . . . .	8 8 0	Railway chairs . . . . .	5 17 0
TIN.		Indian Charcoal Pigs, . . . . .	6 5 0
English blocks . . . . .	128 0 0	Swed., in kegs (rolled) . . . . .	13 10 0
Do., bars (in brils) . . . . .	127 0 0	" (hammered) . . . . .	14 5 0
Do., refined . . . . .	130 0 0	Ditto, in fagots . . . . .	15 10 0
Ganica . . . . .	128 0 0	English, spring . . . . .	17 0 0
Scralls . . . . .	128 0 0	LEAD.	
TIN-PLATES.		English Pig, com. . . . .	19 10 0
IC Charcoal, 1st qua. . . . .	1 6 8	Ditto, L.B. . . . .	20 5 0
IX Ditto, 1st quality . . . . .	1 12 6	Ditto, W.B. . . . .	20 0 0
IX Ditto, 2d quality . . . . .	1 6 1	Ditto, sheet . . . . .	20 10 0
IX Ditto, 3d quality . . . . .	1 12 6	Ditto, red lead . . . . .	20 10 0
IX Ditto, 4th quality . . . . .	1 12 6	Ditto, white . . . . .	38 0 0
IX Ditto, 5th quality . . . . .	1 9 1	Ditto, patent shot . . . . .	32 10 0
IX Ditto, 6th quality . . . . .	1 9 1	Spanish . . . . .	19 0 0
IX Ditto, 7th quality . . . . .	1 9 1	At the works, 1s. to 1s. 6d. per box less.	

**REMARKS.**—The prospects which a few months ago opened to some branches of the metal trade seemed to authorise the efforts then put forth to stimulate production; but we feared that contingencies might arise which would, to a great extent, render abortive the labour and outlay then incurred. He would have been mad indeed who at that time would have ventured to prophesy those contingencies which have since so entirely changed the aspect of affairs, and rash would be the prophet who to-day would hazard a prediction as to what may be the events of to-morrow, and how those events may or may not materially affect the commercial interests of this country. Of one fact there can be little doubt—that so long as England can with honour continue to remain neutral, and the commercial energies of our continental neighbours become crippled in proportion to their losses in men and money, she must eventually reap the benefit of the pacific relations she is enabled to maintain with the civilised nations of Europe. The trade which to some extent had passed into other hands will revert to England once more and upon the restoration of peace, "a consummation devoutly to be wished for," and a return to the development of home industries and public works, recourse will be had to English produce to a greater extent than heretofore. In the mean time, prudence dictates that business should be confined within narrow limits, resources husbanded, and preparations made to take advantage of the turn of the tide whenever it may occur.

**COPPER.**—There is no fresh vitality in English descriptions—little or no demand from the Continent nor from India—but owing to the reduction in the Bank rate, and the possibility of a speedy conclusion to the war, which presents itself to the minds of some, there is a somewhat better feeling, and rather more doing in foreign descriptions at slightly better rates. The general appearance of the market, however, is very quiet, and sellers greatly complain of want of orders, particularly for manufactured, but the rates of exchange to India assume an improving tendency, and as the money market becomes easier, a higher rate of exchange may be obtained, which will probably induce shippers to buy more freely, there seems to exist a clear understanding amongst sellers that their safety lies in combination, and maintaining prices with firmness, especially when limited quantities only are wanted, which seems to be mostly the case now, and no concession is likely to be submitted to, unless for large orders, and these, as yet, are not even alluded to by buyers. Yellow metal remains unaltered.

**IRON.**—We hear from the Welsh districts complaints that should the present continental war not be brought to a speedy close there is every prospect of a continued and increasing scarcity of orders as the season advances. The heat during the past week has been such as materially to hinder the progress of work in hand. However great the inconvenience thus caused may have proved to those who have been looking for a speedy delivery, it has so far been of service that the delay has tended to prolong the period during which the workmen could look for employment, for had the existing orders been executed, no fresh orders being booked, a slack time would have arrived all the sooner. Successful efforts have, notwithstanding, been made to complete deliveries within extensive time, and the past week or ten days has witnessed the fulfilment of extensive engagements. Ever since the early spring of this year America has been one of the best customers of the Welsh iron trade. Orders still flow in from that quarter, and the tariff arrangements prospectively indicate facilities for increased trade. Enquiries from other continental markets are in a great measure held in abeyance. Some are already engaged in the war, others know not how soon a turn in the course of events may, to a greater or less extent, involve them. At all events, they deem it the wisest course to hold their hands for the present, and watch the progress of events. Should peace be re-established on a firm basis, or should it become clear that the struggle will be confined within certain limits, there seems every probability of Russia, among other countries, becoming a purchaser to a very considerable extent, more especially with reference to the development of the railways in that country. There is not much demand for home consumption, and outlets to foreign markets being limited, stocks in certain descriptions of manufactured are increasing on such makers' hands as happen to have executed all their orders. In the beginning of the season the prospects of the iron trade were so fair that strenuous efforts were made to increase the powers of production, and for some months the energy of the masters was repaid by an abundance of orders flowing in at remunerative prices, but while the war now raging on the Continent lasts the probability is that the market may be somewhat in excess of the demand, and that stocks will for a time accumulate. It is not an easy matter when high pressure has been brought to bear, and the mills are working at full speed, to suddenly check their course, or bring them to a standstill, nor is this to be desired even could it be effected. It is better that work should progress slowly and quietly than that the whole machine should be thrown out of gear by an abrupt stoppage. Numbers of skilled workmen are leaving the Welsh districts, having obtained similar employment to that they are accustomed to in Russia. To such an extent is this the case that in some quarters it is feared there may be a lack of skilled workmen to supply the place of the emigrants. Staffordshire is unaltered since our last report; not much doing, but prices steady. Swedish bars are quiet at former prices.—Scotch Pig: "A further decrease is reported of 2379 tons as having taken place last week in the shipments, compared to those in the corresponding one in 1869. The deficiency for the year amounts to 25,311 tons." The market has sustained itself during the week, the current quotation to-day being 51s. 9d. to 51s. 6d. cash, buyers remaining at the lower rates.

**LEAD.**—Although large quantities of metals are doubtless used and destroyed in active warfare, it is a mistake to suppose that, on the whole, the metal trade must receive a stimulus from the war now raging on the Continent. For in peaceful times, and for peaceful purposes, the expenditure in metals is far greater than for purposes of war, and, inasmuch as commerce and finance are materially affected by the events occurring on the battle field, whatever stimulus war may impart is far more than counteracted by the cessation of public works and the diversion into other channels of money which, in the ordinary course of things, might have been laid out in the purchase of metals generally. But lead is the one exception to the foregoing remarks. The expenditure of this metal upon the battle field is enormous, and taking into consideration the appliances of modern warfare, and the enormous forces opposed to each other, should this war last, the effect upon the lead market will be very positive. Hitherto the war has not caused any decided fluctuation, because the public have been, and still are, slow to believe in the probability of its being protracted beyond, it may be, a few days, or weeks at most. This may be so, in which case, as supplies are abundant, there is no reason to look for a further rise resulting from this cause alone; but should the fight be fought out until one or both sides are exhausted—and, judging from the present temper of the combatants this seems possible—who can tell where it may end, or what untold numbers may be yet brought into the field,

Affairs in China are assuming an aspect which may cause a corresponding rise in the lead market there. Altogether it would appear that the manufacturers and sellers are wise in not wishing to press sales at present quotations.

**SPELTER.**—Owing to the localities from which this metal is obtained, the war must have the effect of causing prices to rise should any demand spring up, but at present there is not much enquiry, and no change of importance to report.

**TIN.**—English tin is rather easier than when our last report was issued. Ingots can now be bought at 125l. to 126l., business having been done at these prices, and the smelters are glad of orders. Enquiries are so limited that there is but little to support the market. Foreign tin is also a shade easier. The late impulse which caused a rise in prices may have resulted from the fact of stocks being comparatively small; from their being held, for the most part, in strong hands, and from the turn which the war has taken, the field becoming further removed from those territories which would interfere with the trade of Holland with neighbouring consumers. But here, again, with the continuance of war the prospect of tin no longer remains what they were. The workmen engaged in the various trades in which tin is used are, many of them, to be found in the ranks before the beleaguered fortress of Metz; and the financial condition of both France and Germany will probably curtail expenditure on commercial enterprise for some time to come.

**TIN-PLATES** unaltered.

**THE IRON TRADE** (Griffiths' Weekly Report).—The reduction of the rate of discount to 4 per cent. is a move in the right direction for the best interests of the trade. Business has been steadily during the last week. Fixed prices for marked bars are maintained. A fair business has been done in plates and sheet iron; we have likewise had some orders in this week for sheet iron for galvanising purposes. The events occurring on the theatre of war are so startling that buyers of all kinds of iron at present withhold specifications, under the expectation that something more definite will be known in a few days in regard to the results of the fearful conflict now raging in France. The demand for rails is less active; although we have no new contracts to report this week, we hear that the rail mills at all the works are running full time upon old orders, —75, Old Broad-street, London, E.C., Aug. 26.

**THE COPPER TRADE.**—Messrs. James and Shakspeare—Copper has been in better demand; two or three sales of furnace stock have taken place, but only one has been reported—485 tons of low produce ore, on the 24th inst., as 12s. 4½d. per unit. In Chili bars, the report that peace negotiations are still being carried on, and the news received from Chili on the 23rd inst. advising charters up to the 15th of July only 900 tons pure, have created greater desire on the part of buyers to operate. About 300 to 400 tons have changed hands during the past week, and values are now fully 30s. per ton better than last week. As regards Australian business to the extent of 900 to 1000 tons of Wallaroo cakes and ingots has been done, principally for Russia; and we think there is little, if any, of this make remaining in second hands. Other brands are not much in request at present. Manufactured is without demand, chiefly owing, no doubt, to the continued bad state of the Indian markets.

Messrs. Vivian, Younger and Bond—in Chili bars but few transactions can be reported. Small lots have changed hands at from 62l. 10s. to 64l. 10s. cash, according to brand, and 64l. 10s. to 65l. with a prompt and distant arrival. A large business has been done in Wallaroo, at from 69l. 15s. to 70l. 12s. 6d. cash. In other sorts of copper no important operations have been reported. At the close the general tone of the market is steadier, and firmer than it has been since the war commenced.

**CHEMICALS AND MINERALS.**—(Messrs. J. Berger Spence and Co., Manchester).—Nitrate of Soda steady, at 14l. to 14l. 10s.; Saltpetre: The market is very languid, and scarcely any business is done. Alum in average demand. Loose lumps at 6l. 6s. and 7l. in export barrels; ground, at 7l.—Ammonia: Brown sulphate in increased enquiry, at 13l. to 13l. 10s. White and grey better, at 14l. to 16l.—Coppers: Dry, as usual, at 52s. Green and rusty, firm, at 54s. to 56s. Arsenic at 6l. 15s. to 7l. for fine powdered. Acid: Oxalic, as usual, at 7½d. to 8d. Tartaric acid continues firm, at 1s. 3½d. to 1s. 4d. Sulphuric, at 2l. 15s. Magnesia: Epsom salts at 4l. 10s. to 4l. 12s. 6d. Gypsum: Pure white Norwegian cod liver oil, at 9l. 10s.—Benzole: Inactive, and quotations vary considerably from 2s. to 2s. 6d.—Guano: Best Peruvian, 13l. 17s. 6d. to 14l. 10s.—Disinfectants: Patent, at 5l. for domestic and sewage purposes. Carbolic, 10l.—Pyrites: Without change, at prices reported last week—namely, 6d. to 7½d.; calcined Spanish, at 4s. 6d. R.C.—Lime: Bleaching powder, easy at 8½; superphosphate, at 4l. 2s. to 4l. 10s.; mineral phosphates, 36s. to 60s. for 65 per cent.—Manganese: At 80s. for 70 per cent.—Iron ore: In very good demand; hematite, 13s.; oolitic, 6s. 9d. to 8s. 6d. in Staffordshire, and 2s. 9d. free on rails.

Very little change has taken place in the MINING SHARE MARKET this week, notwithstanding English tin has advanced 3l. per ton. The war has its influence with investors and speculators, and the uncertainty that exists puts a stop to business. The chief transactions have been in West Chiverton, Tincroft, South Frances, Van, Drake Walls, Prince of Wales, East Lovell, Taquaril, East Grenville, Grenville, Tankerville, Providence Mines, West Maria, Wheel Mary Ann, Great Wheel Wheel Vor, and a few others.

East Lovell shares have fluctuated from 33 to 35, and leave off 32 to 33. West Chiverton shares have been firmer, and leave off 54½ to 55½; we understand the dividend to be declared to-day at the meeting, in Cornwall, will be the same as the last—2l. per share. Tankerville, 15½ to 16. Great Laxey shares have been firm at an advance, and leave off 18½ to 19; Cook's Kitchen, 16 to 18; Drake Walls, 22s. 6d. to 25s.; Dolcoath, 12½ to 12½. Prince of Wales, 14s. to 16s.; at the meeting, on Thursday, the accounts, notwithstanding the fall in copper, only showed a loss of 106l. 18s. 11d. on the quarter, including 60l. paid on account of new boiler; the balance of assets over liabilities was 1190l. 17s. 6d., without including the last sale of ore, which will leave a small profit on the month's working; the mine is looking better; the 77 east is worth 10l. per fathom; the 77 west, 8l.; and as good ventilation has been secured here a profitable piece of ground has been opened out for stoping. West Prince of Wales account showed a balance of liabilities over assets of 177l. 9s. 1d., and a call of 6d. per share was made; it is said that the Princess of Wales lode is 10 to 12 feet wide, improving, and this is proving the western part of the West Prince of Wales sett. East Canadon, 4 to 4½; East Pool, 8 to 8½; Great Wheel Vor, 7½ to 8½; Carn Brea, 14 to 16.

Australian United, 1½ to 1½; it appears that while in England we have been experiencing an almost unprecedented drought, in Australia they are experiencing one of the wettest seasons on record, and this has impeded the surface works at the mines. Washing of gold, however, was to commence, according to the promise of the engineer, on the Tuesday following the departure of the mail. The managing director states that he had himself taken dirt from the four faces already opened in the alluvial deposits, and had taken samples of gold from each—at least as we read it—four times the usual paying quantity. The directors, therefore, who are very sanguine as to the success of the mine, hope to receive by the mail on the 6th the result of a month's washing for gold in one buddle. At the Duke of Cornwall Mine, around which are other quartz mines which are some 30 or 40 feet deeper, are, we are told, making good profits, more capital is required to sink it to the requisite depth, and although a good many of the new shares have been taken up, war and its results have interfered in a great measure with their necessary issue. The general impression has all along been that the capital required could easily be raised in a manner more advantageous to the shareholders than that proposed by the directors, and we trust after the arrival of the next mail a meeting will be called to consider it.

Marke Valley, 6½ to 7; Nangiles, 1½ to 1½; New Seton, 30 to 40; North Crofty, 2½ to 2½; North Lovell, 6 to 7. East Wheel Grenville, 2½ to 3; the 75 east is 2½ ft. wide, worth 3 tons of copper ore. The 55 east has again improved to 1½ ton of copper ore per fathom; the lode in the winze is worth 6 tons per fathom. Wheel Grenville, 1½ to 2; the month's tin (12 tons) realised 894l. Providence Mines, 38 to 40; Rosewall Hill and Ransom, 20s. to 25s.; South Condurrow, 2½ to 2½; Tincroft shares have advanced to 35, 37; Trumpet Consols, 20 to 22; Van, 60 to 65; Van Consols, 24 to 24½; West Frances, 22½ to 27½; West Maria and Fortescue, 1½ to 2; West Pant-y-Go, 4 to 1; West Seton, 120 to 130; Wheel Agr, 2½ to 2½; Wheel Oreb, 4½ to 4½; Wheel Jane, 50 to 52½; Wheel Kitty, 7 to 7½; Wheel Mary Ann, 9 to 10; Chontales, 10s. to 12s. 6d.; Don Pedro del Rey, 2½ to 2½; Pacific, 2½ to 3; Taquaril, 28s. to 30s.; Wheel Seton shares have advanced to 45, 50—a rise of 10l. per share.

The Market for Mining Shares on the Stock Exchange has been quiet, but firm, and in most of the leading descriptions a fair business has been transacted. Van shares have been favourably influenced by the very satisfactory character of the reports, and the prospects of a considerably augmented dividend for the ensuing quarter. The works in progress for conveyance of ore, &c., are being prosecuted with the utmost dispatch. The details of the general meeting, held on the mine, appear in another column. There has been a very considerable advance in West Seton, East Lovell, Great Wheel Vor, Tincroft, and several other leading tin mines, consequent on a rise in the Tin Standard. The advices from the Sweet



NO SALE on Thursday week, September 8.



### Notices to Correspondents.

\* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

**RAILWAYS AND INLAND WATER TRANSPORT.**—Observing the announcement of the opening of a line of water communication between Liverpool and Staffordshire by the Weaver Carrying Company, I should be glad of a reply to one or two enquiries concerning it. Firstly, what is the relative cost per ton per mile by the railway and water respectively; also for the entire distance (say) from Birmingham to the ship's side at Liverpool or in the Mersey? Secondly, what is the difference in the time occupied between railway and canal? It certainly seems to me that water carriage would be far preferable where, as in this case, the goods for shipment can be carried direct to the ship's side. Perhaps some of your correspondents can inform me upon these points, and also how many tons, upon an average, a single horse can pull on a canal? Of course I mean boat and load combined.—J. R. C.

**STEAM TRACTION ON CANALS.**—Some years since Mr. Andrew Smith, I believe, proposed the substitution of steam-power for horse-traction on canals, but I do not recollect whether his invention was for putting the engine in the boat or for running it on the tow-path, though I think it was the former. Both would, no doubt, succeed, yet I cannot find that either has been tried. Perhaps some correspondent of the *Mining Journal* can inform me where I can see either principle in operation, and also what has been the result.—H. J. C.

**SAFETY-LAMPS.**—"K. K." (Dudley).—The extinguishing of a lamp by the fall of an extinguisher, actuated by a spring brought into operation by the release of a catch upon an attempt being made to unscrew the lamp-top is not new. It was invented and patented about fifteen years since by Mr. Symons, and the patent has lapsed, yet the invention has been several times repeated. We cannot tell why self-extinguishing lamps have not been introduced, unless it is that practical men prefer to place reliance upon men rather than on mechanism. We have never yet seen lamps called self-extinguishing that could not be opened without putting the light out, except Waring's and one or two others, which after a little use could not be opened at all without breaking the lamp. We are not sure, but believe that the lamps in general use in Belgium are not self-extinguishing.

**MINERAL OIL.**—Can any of your correspondents inform me the quantity of sulphuric acid used in the manufacture of mineral oil—that is, the number of pounds of sulphuric acid used in the treatment of each 100 gallons of oil in its preparation for the market? What strength acid is commonly used, and what is the state of the acid after the oil has been treated? Is the acid capable of being used over again, or does one quantity of oil spoil it?—STUDENT.

**SCALE FOR ADVERTISEMENTS.**—To avoid the necessity of frequent application we may state our charge for general advertisements is—six lines and under, 4s.; per line afterwards, 8d. Average, twelve words per line.

**SHARE DEALING.**—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

## THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, AUGUST 27, 1870.

### THE GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND.

The little and prosperous town of Cwm Avon, Glamorganshire, owes its rise and advancement entirely to the works which are carried on in its midst by the Governor and Company of Copper Miners in England. About 3000 workpeople are engaged therein, the works including the make of iron, the manufacture of copper, tin, chemicals, and the winning of coal; and the dependents of the 3000 men employed in the works constitute the town of Cwm Avon. That the company have been most solicitous for the moral and spiritual, as well as the temporal, welfare of their employees is evinced from the fact that they have founded and supported schools, two churches, chapels, a savings' bank, and other means of social improvement; the whole surroundings of the Cwm Avon works denote prosperity, both material and moral. Upwards of 1,000,000 sterling have been expended on the works, and the capabilities for the production and manufacture of various articles are both extensive and complete, and the works would doubtless, under favourable circumstances, earn a fair return upon the large capital which has been expended. For nine years past, however, there has been no dividend, and the Chairman and directors some time since endeavoured to trace and also to remedy the cause of the defect. Various recommendations are now made, involving an increased expenditure of some 30,000l., but the chief and most important demand in the report is that the works' manager, Mr. WILLIAM PRICE STRUVE, should be superseded. It is most satisfactory to find that there is no charge made of incompetence or want of scientific skill and ability, but simply want of energy and that indomitable "push" in a manager so absolutely essential in a large works of this description. The directors in these recommendations have not only exercised their right, but would have been neglectful of their duty towards those whose interests they had in their keeping, had they for a moment allowed personal considerations to have influenced them in their decision. The directors, or, as they are termed, the Court of Assistants, state that they recommend the appointment of another manager "with very great reluctance, appreciating as they do the many good qualities of Mr. STRUVE." Mr. STRUVE is an able scientific man, but he lacks that very essential which makes to pay such works as those of which he had the control.

But whilst there has been no dividend, it speaks well for the general stability of the concern to find that they have been able to bridge over the very depressed and disastrous time which has been experienced in connection with our staple trades. As a rule, prices have been so depressed that there has been a positive loss upon the manufacture of iron, copper, and tin. Within the past nine years how many once flourishing concerns have collapsed altogether; works of equal magnitude to those at Cwm Avon have been obliged to succumb to the exigencies of the times; crash has followed crash, failure has followed failure, and ruin has come where a few years since it was least expected. The past nine years have, indeed, been troublous times for our manufacturing and mining interests, and although the directors and shareholders of the Cwm Avon Company have to deplore the absence of dividends, still the fact of the works having been held together at all during that trying period is proof of the stability of the concern, the splendid facilities which it contains in itself under favourable circumstances, and in more prosperous times, to pay good dividends, and it also proves that the general manager has had the prudence and caution to avoid those commercial shoals and quicksands which have involved the wreck of other undertakings.

The Court of Assistants have made other important recommendations for the further development and improvement of the works. They very properly regard the cost of the winning of the coal as of vital importance to the success of the company; and when the average output from the company's collieries have during the past nine years been no less than 200,000 tons per annum, the importance of effecting a saving in this department must be self-evident. The average cost of the raising of coal at Cwm Avon for the past nine years has been 6s. 9d. per ton, and if at one time it was only 4s. 11d. per ton there is room for enquiry, and, probably, a material reduction in some department or other. These figures point to the appointment of an able mining engineer, whose whole time should be devoted to the development of the mines, and who should be responsible to the Court of Assistants for the profitable raising of coal as of primary importance to the success of the whole commercial enterprise of the Cwm Avon Works. Increased railway facilities to the neighbouring ports is another important recommendation of the Court of Assistants, and there can be no doubt with narrow gauge communication with Port Talbot, Neath, and Swansea, a great impetus would be given the export of the various manufactures of the company, the import of iron ore and other raw materials would be expedited, and the cost of transit materially reduced.

Regarded as a whole, the supplementary report of the Court of Assistants, presented to the shareholders at their meeting held last week, proves that it emanates from able men, determined, at all sacrifice of personal considerations, to do their duty to the shareholders, and to strive to the utmost to develop, and still further improve, the splendid property which they have under their control. There need be no fear as to the result: the past depressed state of our manufacturing and mining interests is, to an extent, passed; the Cwm Avon Works still exist, with abundant facilities at command to take advantage of

the improvement which all hope will shortly set in; and with energy and "push" on the part of the new manager of the works, and improved railway facilities, the shareholders may safely look forward to a better state of things than has existed for the past nine years.

In another column of this day's Journal will be found a letter which has lately been addressed to the Editor of the *Western Mail* by "An Old Inhabitant of Cwm Avon." We reprint it, because it has reference to a proposed line of railway, which would be of the greatest possible benefit not only to the Cwm Avon Works but to the entire neighbourhood.

"An Old Inhabitant" says the absence of the proposed line is "a reproach to the directors who have failed to recognise its importance," but judging from the following, which we have extracted from former reports of the Governor and Company, it would seem that the fault does not lie with the directors:—

Extract from report April 8, 1869:—"A railway company, which possesses parliamentary powers for the construction of a line of railway through the Avon Valley, was encouraged by the Court of Assistants to apply this session to Parliament for power to vary their route. The variation route was surveyed and proposed by Mr. STRUVE, and was subsequently reported upon most favourably by Mr. TURNBULL, the last elected member of the Court of Assistants, and a high authority in such matters. By the construction of only three miles of line a large mineral railway and district could be connected with the private line of the Cwm Avon Works, and by the latter with Port Talbot. The Court of Assistants much regret to add that the railway company found it necessary to withdraw the Bill, but they hope that the boon which such a railway would be to Port Talbot, Cwm Avon Works, and all the adjacent district, will not be long delayed."

Extract from report of April 7, 1869:—"The item of low charges is heavier this year than usual, in consequence of the support given by the company to the Avon Valley Railway Bill, which, with the kindred subjects of Port Talbot improvements, and the laying down of narrow-gauge on the Great Western Railway, between Port Talbot and Neath, was referred to in the report of last year. It is much to be regretted that no further progress has been made with either of these three undertakings, all of which would be of such great advantage to the Cwm Avon Works."

We would recommend "An Old Inhabitant" to obtain a good subscription list for the shares of the railway undertaking, and we have little doubt that further opposition to the scheme would then be effectually overcome.

### ANOTHER FATAL COLLIERY EXPLOSION IN THE WIGAN DISTRICT.

Last year no fewer than three great explosions occurred in and about the Wigan district, causing the death of 93 persons. As a result, whilst the number of fatal explosions in the year 1869 in the West Lancashire and North Wales inspection district, of which Wigan is a part, was fewer by four than in 1868, the loss of life from explosions in 1869 was greater by 12. The circumstances under which this great loss of life took place may be thus briefly sketched.

On April 1 an explosion, which caused the death of 37 persons, happened in the Orrell Four-feet Mine, at High Brooks Colliery, Park-lane, near Wigan. Although this mine had the character of emitting gas, none had been seen therein, the area then opened out being very small. The ventilation seemed adequate, under ordinary circumstances, to keep the working places clear of gas, provided other regulations were attended to according to the established custom. After the explosion there was found a shot hole improperly drilled beyond the top of the coal and into the roof of the mine. From that cause, combined, perhaps, with that of not having been properly charged, it had evidently blown out without breaking down the coal. The coal on the sides of the roads and the roof of the mine was burnt and charred for a long distance, much beyond that which gunpowder could possibly produce, notwithstanding a number of exploded powder-cans lay scattered in all directions. Under these circumstances it appeared to Mr. HIGSON, the Government Inspector for the district, very clear that a quantity of explosive gas had accumulated in one of the working places next to that in which the shot had been fired, and that this gas the flame of the blow-out shot had ignited. A fireman was regularly employed there to make a daily inspection of all the workings, and remove gas, if he found any, before a shot was fired. This man must, therefore, either negligently or inadvertently have omitted to examine all the places in that particular part of the mine. Hence the accident. Negligence in this case was the more criminal, inasmuch as in 1866 a serious explosion happened in the same mine, and the treacherous character of the place required more than ordinary care in the management.

The most serious explosion of the year occurred on July 21, in the Nine-feet Mine, at Haydock Colliery, near St. Helen's, and resulted in the death of 59 people. The workings presented strong indications of a shot-hole having been charged and blown out up one of the brows. That shot neither the fireman nor the shot-lighter could have ignited. The work must have been done by one of the men contrary to orders, and before the places were examined by a competent person.

On Nov. 15 an explosion of fire-damp happened at the Low Hall Colliery, Wigan, which, besides killing 27 persons, set the mine on fire, and led to great financial loss. Here, again, a shot fired by the shot-lighter had blown out and ignited the gas. If this man, or a fireman, had carefully examined some of the working places adjoining the one in which the fatal shot blew out in all probability the issue or accumulation of gas would have been discovered, and this serious calamity avoided. It transpired that the shot-firer was not in the habit of doing so, and it did not appear that he was ever required to make such an examination. "Neither (writes Mr. HIGSON in his report to the Home Secretary) was it customary where other explosions have happened."

The calamities up to this date this year lead to the inference that 1869 will close less disastrously to West Lancashire. Would that we could add that no great explosion has taken place there this year. Such a record is prevented by the disaster that, happening on the morning of yesterday (Friday) week, has deprived 20 poor colliers of life, 9 women of their husbands, and rendered 20 children orphans. The place of the accident was Brynn Hall Colliery, Ashton-in-Macerfield, a short distance from Wigan. The colliery is situated on the estate of Sir ROBERT GERARD, a short distance from the Brynn Station, on the New Lancashire Union Railway. It is carried on by Messrs. W. and J. B. CRIPPIN, and is one of a number which have recently been opened, in order to cover the extensive coal fields in what has until recently been a purely agricultural district. For two or three years the Four-feet seam alone has been worked, but within the past few months the Wigan Nine-feet has been gotten to a limited extent—so limited that the plan of the workings only occupies a few square inches, the most distant place being not more than 120 yards away from the shaft, which is about 180 yards deep. To begin work for the day some 150 men or so went down the mine, some 40 of them descending to the Nine-feet. All went on well till about 9 o'clock. At that hour there was an explosion of so great a force that in an instant the woodwork about the upcast, where the chief force would seem to have vented itself, is described as a mass of ruin; bricks and large pieces of timber being hurled from the pit mouth, and doing much damage about the entrance to the shaft. The operations to recover the 100 men from the Four-feet, and to bring away the wounded and the dead from the Nine-feet, were conducted vigorously by the authorities of the colliery, assisted by their competent neighbours.

At one time it was feared that the works were on fire, but it happily turned out that only a little prop wood and brattice had ignited. The explosion had taken place in one of a couple of levels, which run from the downcast shaft in a direction nearly north and south. In the easterly level there were "keen" indications of the presence of explosive gas, and it was in the westerly one where the coal was at first supposed to be on fire. By Saturday morning the return air tested at the top of the upcast was found to contain gas enough to fire in the lamp.

Clearly, therefore, there was plenty of gas after the explosion. That the workings were not free before the accident seems certain. At the same time the colliers did not complain, indeed spoke, most of them, of the abundance of the ventilation. The coroner's enquiry has begun, and until it is over we shall neither discuss the cause nor cast blame upon anyone. Nevertheless, it seems placed beyond doubt that between this accident and the three of last year there is a somewhat close resemblance. The seam was the same as that which was the scene of the Low Hall Colliery and the Haydock Colliery explosions; and the disaster was preceded by the firing of a shot which, contrary to instructions, had been rammed in before the hole had

been examined by the fireman. He, too, poor fellow, was killed directly he had ignited the charge, thereby sharing the fate of the firemen in the Park-lane and the Haydock explosions, and of the shot-lighter in the Low Hall case, all of whom, like this man, were out to be a want of discipline, and a reckless use of gunpowder in a mine requiring, from every grade of workmen, the strictest attention to all the means of safety enjoined upon them by pit regulations otherwise within their reach.

### THE LLANSAMLET COLLIERY EXPLOSION.

The official investigation into the cause of the late lamentable catastrophe at the Charles Pit, Llansamlet, Glamorganshire, whereby 30 poor fellows lost their lives and 19 others were seriously injured, was concluded on Friday last. In the Journal of Aug. 6 we took occasion to refer to this explosion, in order to point out the danger and the inconsistency of working in proximity to old workings with naked lights, and also the necessity which is imposed upon our Government to insist upon the entire abandonment of candles in all collieries. The Government Inspector for the district (Mr. T. E. WALES), and also the coroner's jury who investigated the case, have to a great extent endorsed our observations, whilst the general evidence given confirmed the view we then took. The colliery in question had been worked for a great many years, and although not a very extensive one the underground operations had been pushed into very close proximity to some old workings, known as the Tyr Cenol. Not only were these old workings known to exist, but they had been frequently tapped and borings had also been made, and as gas was found in the old workings the bore-holes were plugged. Other precautionary measures seem to have been adopted to prevent the exuding of the gas from the old workings, and men were engaged night and day in attending to the plugs and other matters in connection with the places from which danger was expected. Such being the case, it does seem surprising that the general manager of the pit should not have given the most peremptory orders for the use of locked safety-lamps only. We have no desire to reflect unduly upon the manager; probably the happy immunity from accidents in this pit rendered all parties more indifferent to their own safety than they should have been. The Government Inspector, in his evidence, states that, after the most careful examination of the colliery, his opinion is that the explosive gas escaped from the old workings, that the quantity of air which there circulated (only about 9000 or 10,000 cubic feet per minute) was too small to properly dilute and render harmless this gas, hence the explosion. Mr. WALES thinks that the current of air circulating in the vicinity of the old workings should be at least 20,000 cubic feet per minute, and that locked safety-lamps should be also used there. The coroner's jury took the same view of the case, and appended an official recommendation to that effect to their verdict.

We have no doubt that the views of the jury will be carried out in their entirety by the managers of the colliery in question; but, for our own part, we would that the Llansamlet catastrophe should have still wider scope, and that it should teach one great practical lesson—the entire abandonment of all naked lights in collieries. The Government Inspector has not hesitated to say, in reference to this event, that had safety-lamps been used the catastrophe would have been avoided. If safety lamps are advantageously used in any colliery, why not make their use compulsory and general? The lesson taught us should not be thrown away, and we believe our colliery proprietors would rejoice to see a Government enactment which should condemn the use of naked lights in all pits, and that such dangerous working in connection with our collieries should be regarded as a thing of the past.

### SIGNALLING UNDERGROUND IN COLLIERIES.

The importance of a better system of signalling underground in collieries than that at present adopted formed the subject of a very interesting paper recently read before the Midland Institute of Mining Engineers by Mr. BAILEY, of Wakefield. He asserted that the magnetic system would be found invaluable for colliery purposes, the advantage claimed for signalling by such means being its simplicity, by which the intelligent colliery mechanic could master all its details in a very short time, and with very little observation; and that in case of breaking it was very easily repaired, the only breakage that he had met with being from a fall of roof. In the case of a rope on a steep incline breaking, the probability was that the ropes would run down as far as the face, dealing destruction in all directions. By the signal, warning could be given in an unmistakable manner to the man at the far end by a prolonged ringing from the engine-man—the man, above all others, the soonest aware of any breakage of the rope. The system was the managing of two wires connected to a small magnetic battery. Two copper wires were stretched from one end of the machine, or round to the other end, a bell being attached to each extremity, being parallel to each other, so that by the pressure of the finger and thumb they could be held together. By that means a signal was transmitted—in technical language, a current of electricity was established from one pole of the battery, which was placed near to the engine-house, to the other pole, on its way actuating all the bells through which it passes. Spikes were driven into the dirt or coal near the roof, at a distance of about 10 yards apart, to support the two copper wires. The sump at the shaft bottom, or the sump in any locality, would be made to announce, by the bell, that it was full of water. The apparatus, a model of which was exhibited, could be as effectual in signalling from Barnsley to London as for a shorter distance, for there was no limit to its efficiency, so far as distance is concerned. One battery would be sufficient for a colliery, and would only require to be renewed three or four times a year, at a cost of a few shillings. But much would depend on the amount of signal sent out of it, the longer the distance, however, requiring to be signalled over the cheaper the system proportionately became. The bell, we might say, could be arranged to give a dead vibrating motion. If the engine-man was absent, or neglected to attend to the signal, the bell went on ringing; if the men required signalling out of an incline, a so pre-arranged signal could be acted upon; in fact, the bell at the far end could only be rung by the engine-man for the purpose of a warning of danger. Every ring of the bell would have to proceed from the engine-room, and could be made to act in all parts of a colliery. The system could be applied and varied in many ways. There were no pulleys or any complication whatever, and the engine-man and hanger-on could converse together and express their respective wishes and desires in a manner which could not be mistaken by a means of the bell. In conclusion, Mr. BAILEY said it would be a source of gratification to him if he should have contributed to the adoption of a system of successful signalling in collieries, and in seeking for that purpose the aid of a science which had been too much neglected in improving their general engineering arrangements in mines, both above and underground. The value of the paper was fully recognised by the engineers present, and a cordial vote of thanks was awarded to Mr. BAILEY for his contribution, the system advocated being considered an important improvement over the present mode of signalling in underground workings.

**COAL FOR THE ADMIRALTY.**—The full reports of the experimental trials of Welsh and North Country coals (recorded in the Journal of July 23), made during the last 12 months on board HER MAJESTY'S ships *Lucifer* and *Urgent*, at Portsmouth, have now been issued. The *Urgent* has two sets of boilers, each with an independent funnel, affording an opportunity of comparing and testing the old and new forms of furnace; the new, or smoke-consuming furnace, differing from the old mainly in being fitted with a hanging-door below the bridge at the back of the furnace, on which is fitted a gridiron slide, for varying the quantity of atmospheric air admitted into the combustion chamber from the ash-pit, for the purpose of producing combustion of the products of combustion. The trials with improved furnaces demonstrate that with Welsh and North Country coals with in equal quantities there is nearly the same amount of smoke as with best Welsh coal in ordinary furnaces; there is a saving of fuel of 14.83 per cent., with an increase of power of 7.56 per cent.; giving a gain of 22.39 per cent.; there is less ash by 21.15 per cent.; less soot by 52.21 per cent., thus enabling a vessel to run double the time



without cleaning tubes; less clinker by 23.64 per cent., thus allowing the fires to work longer without cleaning. A comparison of coals shows that by using all Welsh coal fresh worked there is a saving of 10 per cent., as compared with mixed, used in the same furnaces; but there is an increase of ash by 10.66 per cent.; there is less soot with mixed coal by 35.33 per cent. than with Welsh; there is less clinker with all Welsh by 15 per cent. Even used in the altered furnaces, which are decidedly unfavourable to Welsh coal, there is a small saving in using all Welsh, if fresh worked and of best quality; but it is considered that the less soot and ash with mixed coal more than compensates for the difference. With regard to the prevention of smoke, it is probable that most of the smoke-preventing contrivances would be accomplished this, so that the less valuable North Country coal could be burnt without smoke when Welsh was beyond reach, and the old furnace could be retained. An excellent furnace-door, invented by Messrs. WRIGHT and Co., of Homerton, was described and illustrated in the *Mining Journal* of May 10, and would, no doubt, prove quite as favourable to the use of North Country coal as the bridge door and gridiron proposed by the Admiralty officials, whilst the cost of applying it would be less than the cost of the bridge door and gridiron. We understand that Messrs. WRIGHT and Co.'s invention will be thoroughly tested at Portsmouth, and as it is equally applicable, whether Welsh or North Country coal be used, it is in every way deserving of success.

#### THE ELSECAR IRON WORKS.

There are few works in the southern part of Yorkshire better known than those at Elsecar and Milton, belonging to Messrs. W. H. and G. Dawes, and who, as a private firm, are amongst the largest producers of pig-iron in the kingdom. They have six furnaces at their works in the West Riding, three in North Lincolnshire, and four at Denby, in Derbyshire. Elsecar has long been noted for the production of a superior quality of rail, which has a high reputation in the market, and for which there is now a very large demand—so much so that the firm have nearly completed a new mill, which will shortly be in operation. Very extensive alterations, however, are being made at the works, it having been determined to put down a number of puddling-furnaces on Siemens' patent, by which the heat is obtained by gas, and in connection with which they will be worked by Whitham's patent puddling-machine, or mechanical rabble as it is termed, by which a good deal of manual labour will be dispensed with. Although necessitating a very large outlay at starting, from the extensive character of the works for producing the gas, &c., yet they are ultimately found to be economical, seeing that by them a "heat" will consist of from 15 to 20 cwt. of iron, instead of about 4 cwt. by the ordinary furnaces, whilst it is calculated that there will be a saving of something like 50 per cent. in fuel.

There are to be six double puddling-furnaces complete, so that when in full operation there will be a very large increase in the output of puddled iron. At the present time there are 36 puddling-furnaces, but owing to the weather they have not been fully worked, so that the firm has been unable to obtain sufficient for their requirements. The four blast-furnaces, two of which are new, are iron-cased, the waste gases being utilised in the usual manner in heating the boilers. The mills comprise a plate one, 22-in. train; a rolling-mill, with 18-in. train; and the new mill, now nearly finished, a 20-in. train, which will be connected with two of Howard's patent safety-rollers, besides which there are nine vertical rollers—five in the forge and four in the mills, most of them about 20 ft. long. There are also two engines, each of 120-horse power, a steam-hammer weighing 5 tons, and three others weighing 2 tons 15 cwt. each. The two furnaces at present in blast are capable of making 40 tons of iron every 24 hours, so that when the four are in operation there will be produced from 500 to 600 tons per week. The plates made by the firm are in high repute, and about 15 tons in a shift of 12 hours are made, and 25 tons of rails in the same time.

At the works at Milton, in connection with Elsecar, there are two blast-furnaces, 24 puddling-furnaces, two sheet-mills, a merchant-mill, and a guide-mill, with a foundry where heavy castings are made. The ironstone used in the production of the pig is a mixture of the local greystone, which is calcined, and the brown ore of Lincolnshire, the two making a very good description of iron. The local ore is from the mines of Earl Fitzwilliam, with whom the Messrs. Dawes have a very profitable contract for the supply of a certain quantity weekly. They are also in a similar position with regard to coal, which they get much cheaper than could be supplied by any colliery in the West Riding. The contract was entered into by the late Earl for a number of years at a time when coal was very cheap, and wages much less than at present. Two or three years since the present Earl endeavoured to have the agreement cancelled, but after a good deal of litigation it was found to be binding, although admittedly unprofitable. The stone from Lincolnshire is obtained on the ground leased by the Messrs. Dawes, near to the Trent, and is brought direct to the works by railway, there being a branch line from the South Yorkshire. The wagons in return take back coal and coke for the use of the furnaces. There are drops, and all necessary appliances for taking the stone to the furnaces, whilst machinery of the best and newest description, to economise manual labour, is to be found in connection with all departments. Owing to the works and the collieries, the villages of Elsecar and Hoyland, which adjoin, have become very important places, the Earl Fitzwilliam, who is the principal owner of property, having made the former in particular a really model place for working men to reside in, the houses being good, with gardens, whilst the streets are lighted with gas. There are also excellent schools, a fine church, and several dissenting places of worship.

#### METCALF'S FURNACE FOR THE FUSION OF MINERALS.

(Translation of an Article in the Florence newspaper, the "Giornale delle Arti e delle Industrie" (Journal of Arts and Industries) of August 13.)

We have received some explanatory details respecting the new furnace for the fusion of minerals invented by Mr. GEORGE METCALF, of Pertuisola, near Spezia, for which he has secured patent rights in Italy, France, Belgium, Germany, England, and Spain.

We cannot to-day explain the fundamental bases of the system, inasmuch as to do so completely and clearly diagrams would be necessary. But in the meantime it will not be uninteresting to give in our Journal some particulars relating to and comprising the essential features of the invention. Mr. METCALF's furnace holds continuously four charges, which are divided as follows:—Two in one of the chambers, one in another chamber, and the last on the side of fusion. These charges average 1500 kilogrammes of mineral; they are removed after the processes of extraction of sulphurous parts, combination, and fusion have been accomplished. Every charge is drawn after about 24 hours from the time it was first put into the furnace, so that one is drawn every six hours. The dross (ashes, waste, refuse) is afterwards treated in draught furnaces adapted for the purpose.

In modern industrial inventions two objects are mainly sought to be attained—quality or excellence of workmanship, and economy in production. This system appears admirably to secure these conditions. The treatment of the minerals is, according to the assertion of competent judges, carried out with true perfection, and the economy in working is very considerable, as it is brought to bear in several ways, such as fuel, labour, repairs, and the materials and utensils in general requisite for this furnace.

To all this the inventor adds that a very important saving is derived from the very limited loss of volatilisation under his system as compared with the ordinary process, under which, as is well known, the loss is ordinarily very considerable. The economy (saving) in fuel is in these proportions—that while with the old reverberating furnaces the expense was from 26 to 28 frs. of coal to every ton of minerals, with this new furnace the expense for the same quantity of mineral does not exceed 5 frs. Wear and tear of material and plant is reduced by two-thirds. Manual labour can scarcely be estimated as equal to what is required for the old furnace, and we are assured is much simplified. The diminished loss of volatilisation remains to be taken into account; this may be estimated at from 2 to 3 per cent. as compared with the loss under the old system. This is accounted for as follows—that under Metcalfe's system, instead of burning the lead (thereby producing smoke and vapour), the lead is, by

not being brought under the action of heat so intense as in the old systems, not volatilised or oxidised, but simply metallised.

For the above reasons we have considered it not inopportune to call the attention of our readers to the very useful nature of this recent invention. The furnaces can be constructed of a medium length of 10½ metres, with a breadth at the widest part of 4½ metres, and a height of 2 metres.

For the present we restrict ourselves to the preceding remarks, but as it is evident that the subject is one of very great importance to the mining interests, we shall not lose sight of ulterior and more ample details, with which we shall return to the topic in due season.

THE EDITOR.

**THE IRON AND STEEL INSTITUTE.**—The next meeting will be held at Merthyr Tydfil, commencing Sept. 6, under the presidency of the Duke of DEVONSHIRE. Papers will be read and discussed on the mornings of Tuesday and Wednesday. The extensive iron works at Dowlais, Aberdare, Cyfarthfa, Swansea, Ebbw Vale, &c., will be visited on the afternoons of Tuesday and Wednesday, and also on Thursday and Friday. The local ironmasters are making extensive arrangements for the hospitable reception of the Institute, and a very successful meeting is expected. About 150 members have already signified their intention of being present. A considerable number of new members will be elected at the meeting.

**DYNAMITE.**—Messrs. NOBEL and Co., of Hamburg, have just erected and opened a very large Dynamite manufactory at Prague, to meet the demand in that locality, which is immense, dynamite completely superseding the use of gunpowder in the mines and quarries in Germany. It is greatly to be regretted that the patented interests of Government officials should in this country be allowed, under the influence of the present Government, to interfere with the free use of so safe and valuable an explosive as dynamite, and that our mine and quarry owners should have such impediments thrown in their way that they are in effect precluded the advantages which are open to the Germans and other continental nations.

**ALLUVIAL GOLD IN NORTH WALES.**—In last week's *Journal* we called the attention of our readers to the fact of considerable alluvial gold being lately found in the River Mawddach. We are now informed that the directors of the Gwynfynydd Company are determined in consequence to drain the large basin at the foot of the celebrated Rhaeadr Mawddach waterfall, and they commenced operations last week. This will be a work of considerable difficulty, but of a most interesting and exciting character. Experiments have been made in California with the same object, but we doubt very much on so large a scale. A level of some length has been already driven through the solid rock, which will lower the pool at once about 4 feet, and give that additional height to the waterfall. Of course, if rain and floods set in the works will have to be suspended. However, it is expected, with great exertion, to get all the water out by Tuesday next. The result is of a highly speculative character, and will depend a great deal on the nature of the gravel and debris at the bottom. As all the rich reefs are above the pool, and a large coarse gold has been found below the pool, it is only reasonable to suppose that a large quantity will have been in past and countless ages deposited in the pool itself. On the other hand, the force of the waterfall—60 feet high—may have denuded the subjacent rocks of all their supposed treasure. It is a bold experiment, and if successful it will not only benefit the shareholders, but entitle the projectors to much praise. One thing is certain, that a large quantity of splendid trout and sewin will be captured.

**GEOLOGICAL SURVEY OF CANADA.**—Sir WM. LOGAN, late Director, having returned to Montreal, is engaged in revising the Reports for 1869. Mr. SELWYN, his successor, is now in Nova Scotia, examining its gold fields. Mr. EDWARD HARTLEY, F.G.S., Mining Engineer to the Survey, is also in that Province, and has begun the yearly inspection of its collieries. Both gentlemen will probably remain there until the approach of winter.

**BRITISH AND CANADIAN COAL.**—The main seam of the Springfield coal field, Cumberland, Nova Scotia, has been carefully examined and reported upon by Mr. EDWARD HARTLEY, F.G.S., mining engineer to the Geological Survey of Canada. The coal is highly bituminous, or fat caking coal, very similar in character to that of the North of England. It is an admirable gas coal, and the amount of sulphur is below the average of Newcastle coal. The coke appears well adapted for iron smelting, and with regard to the quantity of ash the Springfield coal bears favourable comparison with British and with other American coal. The subjoined will show the relative constituents of the several coals:—

Volatiles matter water included	35.50	37.60	35.39
Fixed carbon	60.50	57.00	60.46
Ash	4.00	5.40	4.15
Total	100.00	100.00	100.00

Whether it is to be considered a detached coal field or a portion of the great Cumberland coal field of Nova Scotia is still open to question; but the region appears to warrant the most careful examination. At present no active collieries of any extent exist in this coal field for want of communication with tide water, but the completion of the Intercolonial Railway will effect communication not only with the Bay of Fundy, but with the Basin of Mines, Halifax, and many other points where the coal will be in demand.

**THE PENNSYLVANIA COAL STRIKE.**—After four months of suspension of work in the anthracite coal region, a compromise has been effected between the operators and the men. The following is stated to be the substance of the agreement made between the committee of the anthracite Board of Trade and the committee of the Working Men's Benevolent Association:—Discharge of men may be made for incompetency, bad conduct, or other just cause, but not for carrying out the orders of the Working Men's Benevolent Association. The equalisation resolution passed by the Working Men's Benevolent Association is that miners are to work regularly, and that any miners making over \$100 are to be liable to a reduction of from 10 to 40 per cent., according to the amount. The rates of wages are to be fixed each month in accordance with the prices of all sizes of coal above pen at Port Carbon. This is to continue during 1870. The agreement is signed by five operators selected by the President of the Board of Trade and President of Working Men's Benevolent Association.

**THE COALS AND IRON ORES OF PICTOU COUNTY, NOVA SCOTIA.**—In an interesting appendix to reports on the Pictou Coal Field, by Mr. EDWARD HARTLEY, F.G.S., full descriptions and analyses of the coal from the Pictou coal fields are given. There is some valuable information on the albertite, stellatite, and other oil coals and shales, and an elaborate paper on the practical trials of Pictou coals. The results obtained, although the trials were made under various conditions, appear to have been in all cases very satisfactory.

**AMERICAN ROOFING SLATE IN ENGLAND.**—The excellent quality of the Vermont slates has several times been referred to in the *Mining Journal*, and it appears that the proprietors of the quarries have now undertaken to compete with Welsh slate even in England. It seems that some two months since a cargo of the slate was shipped to England, with a view of introducing it for ornamental roofing. The result has "more than met the expectations of the shipper, and he is confident in the belief that England will want all of Vermont's Unfading Green Slate." The August shipments will exceed those of any previous month this season.

**THE NORTHERN RAILWAY OF SOUTH AUSTRALIA.**—Under the title of "Our Northern Country: its Resources and Development," a pamphlet has been published by Messrs. ANDREWS, THOMAS, and CLARK, of Adelaide, in which it is remarked that the importance of fostering the opening up of the country has been recognised by successive Parliaments, who have legislated session after session with the view of encouraging the construction of a railway by English capitalists, which is the only means of transit that can overcome the peculiar circumstances of the climate. The existing Act, offering 5 per cent. guarantee on a construction expenditure of 3750*l.* per mile, has not been found sufficient for the purpose, but it is considered that if the guarantee were increased to 6 per cent. on a construction expenditure of 4000*l.* per mile, the work would be carried out with English capital at once. The enormous mineral wealth of the district,

for the development of which the railway is required, has been established by the workings and surveys already made; but these are comparatively worthless until a railway is provided.

#### TRADE OF THE TYNE AND WEAR.

Aug. 25.—A great lull has taken place in these ports lately in most trades, the arrivals of ships have been comparatively few, and little has been done in imports and exports, with the exception of the Coal Trade, in which a fair amount of business continues. Freight rates are not so good quite, yet they are considerably better than they were before the war, at least 2s. per ton for coasting freights, and foreign freights are higher in proportion. However, on the whole, trade was decidedly flat last week, the great fall in the grain trade having put an end to the speculation in that branch, and the continental markets appear to be, with the exception of Hamburg, glutted with coals. Of course, merchants are not anxious to deal with France in the present unfortunate position of that country. The demand for coke and coking coal continues, and a fair amount of business is done in most descriptions of coal. The Iron Shipbuilding Trade is brisk, most of the iron works, &c., are pretty well employed, and the great works at Elswick are, of course, very busy, especially in manufacturing guns. The annual *soiree* in connection with those works was held on Saturday, in Newcastle, and, as usual, was well attended. There is a flourishing Mechanics' Institute and schools in connection with the works, and it appears from the report that there are 3403 books in the library. Of 149 pupils who had entered the evening classes at the beginning of the season, 73 presented themselves for examination by the Science and Art department on one or more subjects, and of those who came up 53 passed, but as many of the pupils attended several classes, there were only 3 per cent. who failed to pass on some one subject. The total income for the year had been 298*l.* 7s. 9d., of which 210*l.* 4s. 3d. had been received from the treasurer of the general fund formed by subscriptions of the workmen. The school report was highly satisfactory. The average attendance of boys had been 282, of girls 200, and of infants 285—total 767, of whom 481 were present at the examination. The number who passed the examination in reading was 477, in writing 477, and in arithmetic 458. The income had been 1016*l.* 1s. 1d., and the expenditure 1242*l.* 2s. 10d. Sir William Armstrong expressed his pleasure at meeting so respectable a company, assembled not only for the purpose of rational recreation, but able to testify their sympathy with the object for which the schools had been established. He had great pleasure in congratulating them on the continued prosperity of both institutions. The school had been highly encouraged by the Government Inspector, and the attendance had been larger than at any former period. The newly-established science classes had been highly successful, so much so that out of a very large number who had gone up for examination an unusual number had passed. The state of the institute and schools reflected great credit on all concerned, and he hoped that such a condition of things would long continue.

The Iron Trade, of course, cannot be expected to improve in the present state of affairs on the Continent, but there appears to be a hopeful feeling amongst ironmasters that the war will soon be ended, and if this should happen the iron trade will, without doubt, experience a rapid improvement. Prices are much lower, and no scale is adhered to; yet there is no deduction on the amount made or sold; indeed, the quantity sold increases—that is, pig-iron—as is shown by the fact that the stock at Middlesbrough continues to decrease.

At the Addison Colliery, one of the coking collieries west of Newcastle, the men have given notice that they require an advance of price, but this demand is not likely to be acceded to, as the masters consider that a very good price is paid at present, and certainly fair wages are made by the majority of the men. An excellent coking coal is got here from the Brockwell seam, although the seam is rather thin, and a large quantity of coal has been laid up in anticipation of the possibility of a stop, if this demand of the men should be persisted in.

A Dutch man-of-war has been in the Tyne Dock this week, for the purpose of receiving her complement of Armstrong guns.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Aug. 25.—The Iron Trade appears to be a shade quieter. The demand for the ordinary small makes continues sufficient to keep the works fairly employed in the production of these sorts, but few specifications are received of a heavy character, and there are less orders on the books. The United States demand continues to be the mainstay of the trade, and there is a fair amount of iron being made for India, but generally orders are smaller, and the end of the quarter hardly seems likely to be so brisk as the beginning. The further reduction in the rate of discount may help to strengthen the trade, but it is probably mainly the result of the withdrawal of capital from commercial channels, owing to the interruption of the war occasions. The Hardware branches show no great change. They are not generally brisk, but there is a moderate demand, and no serious cause for complaint.

A meeting of delegates from the ironworkers of the South Staffordshire district decided on Saturday, but only after a long discussion, to "appeal" to the masters for an advance of 1s. per ton for puddling, and a proportionate advance for millmen and other classes of ironworkers. The document is to be sent to the Chairman of the South Staffordshire Ironmasters' Association, who is to be requested to lay it before his colleagues at the next meeting. That would ordinarily take place on the last Thursday in September, but the men appear to understand by a meeting the weekly assembly of the trade at the Wolverhampton and Birmingham Exchanges. The grounds adduced to justify the advance are that the trade has revived in consequence of the Franco-Prussian war, which they say is proved by the reduction of the stocks of puddled bars in the district; and they allege that the puddlers have been pressed to begin on Monday mornings, in order to enable the other departments of the works to be supplied with puddled bars; and they further allege that there is a want both of puddlers and under-hands. They also assert that whilst wages were reduced 1s. per ton iron was only reduced 10s., or half the usual proportion in 1868; and that in 1869, when trade revived, the men were raised 6d., and the price of iron advanced 1*l.* This latter statement is quite incorrect. The reduction of 1s. brought the men to the old scale in reference to the price of iron, which is that they receive in shillings what bars are in pounds. It was decided to hold another meeting on Monday next, to receive the reply of the masters. One remark may be made with reference to this "appeal"—that its arguments are confined to the case of puddlers. There is a general conviction that this class is now underpaid in comparison with the other ironworkers, and Mr. Williams, manager of the Patent Shaft Works, sought to redress the grievance some time ago.

The *Mining Journal* took an active part in endeavouring to preserve to the miners of South Staffordshire the surplus of the Hartley Colliery Fund allotted to the district, as a nucleus for a relief fund for the men in case of accidents, it having been proposed that it should be devoted to the enlargement of the South Staffordshire Hospital. The trustees of the Fund assented to change their decision, provided the men raised 500*l.* After many appeals only 70*l.* of this sum is forthcoming, and it must now be concluded that the miners are so indifferent to making a provision for themselves in case of injury, or for those dependent on them should they be killed, that there is no hope of securing the object desired. It is a very painful confession to make.

A penalty of 5*l.*, and 17*l.* 10d. costs, was inflicted upon Mr. Summers, chief agent of the Dark Lane Colliery, Shropshire, for neglect of the first General Rule, whereby an explosion occurred, causing the death of two men. The pit was declared unsafe on the day preceding the explosion, and lamps were substituted for candles, but the witness who stated this said he was working in the same place on both days, and did not perceive any gas. The night men were not permitted to descend, air-pipes were laid down on the morning of the explosion, and the men went to work with candles until the explosion occurred. It was urged for the defence that the men had thrown back their dirt on the mouth of the pipes, and thus obstructed the air, but the Bench decided that due care had not been taken to avoid the accident, and inflicted the penalty named.

Amongst the shoal of limited joint-stock companies established prior to the collapse which swept away so many, and ruined multitudes, none has proved more genuine than the Patent Shaft and Axletree Company, at Wednesbury. The report for the year, presented at the meeting on Wednesday (yesterday) shows that the profit of 57,419*l.*, after paying 15*l.* per cent. to the shareholders, amounts to 15,000*l.* being devoted to the extension of the steel works. At the meeting the Chairman, Mr. T. Walker, simply observed that the report spoke for itself. This great works has the advantage of being under the control of Mr. R. Williams, one of the ablest men of business in the district.

The Midland Steam-Boiler Inspection and Assurance Company's half-yearly meeting was held at Wolverhampton, yesterday, Mr. G. Barker (the Chairman) presiding. The report of the directors showed that after paying 10 per cent. on the capital, the profit, amounting to 879*l.*, enabled 710*l.* to be added to the reserve fund, which is now 2400*l.* The boilers under the supervision of the company were:—Southern District: Boilers assured, 898; inspected, 933; total, 1831.—Northern District: Boilers assured, 687; inspected, 323; total, 1010;



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1868.	Yellow grease used (lbs.)	Don Oil used (pints).	Miles run.
March 5.....	4	nil.	78
" 6.....	1	nil.	104
" 7.....	1	nil.	104
" 8.....	1	nil.	104
" 9.....	1	nil.	104
" 10.....	1	nil.	104
" 11.....	1	nil.	104
" 12.....	1	nil.	104
" 13.....	1	nil.	104
" 14.....	1	nil.	104
" 15.....	1	nil.	104
" 16.....	1	nil.	104
" 17.....	1	nil.	104
" 18.....	1	nil.	104
" 19.....	1	nil.	104
" 20.....	1	nil.	104
" 21.....	1	nil.	104
" 22.....	1	nil.	104
" 23.....	1	nil.	104
Total .....	21½	6½	1950

N.B.—The difference in the cost of grease and oil used as above is FIFTY PER  
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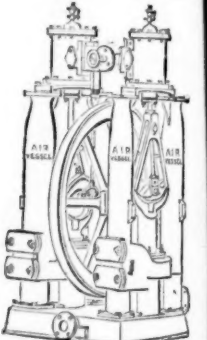
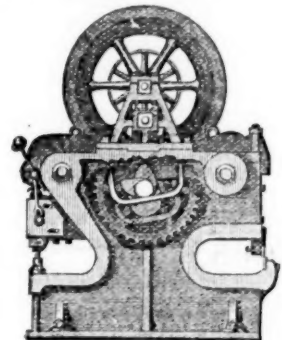
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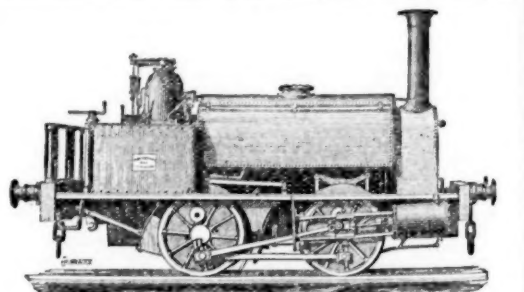


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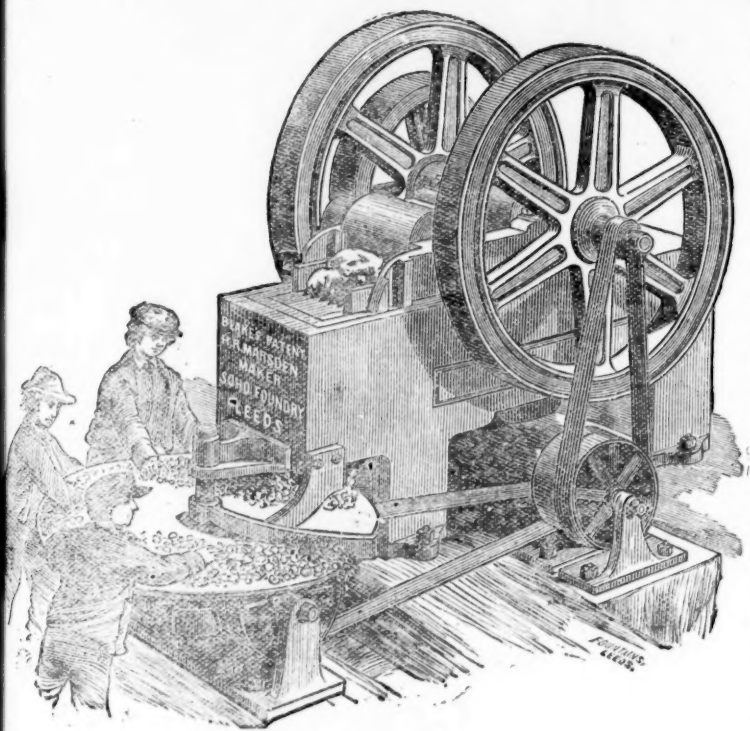
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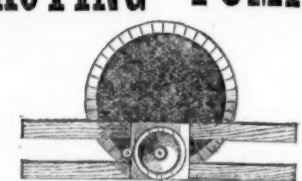
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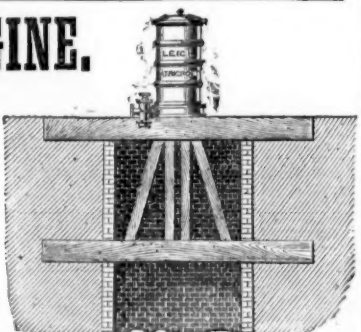
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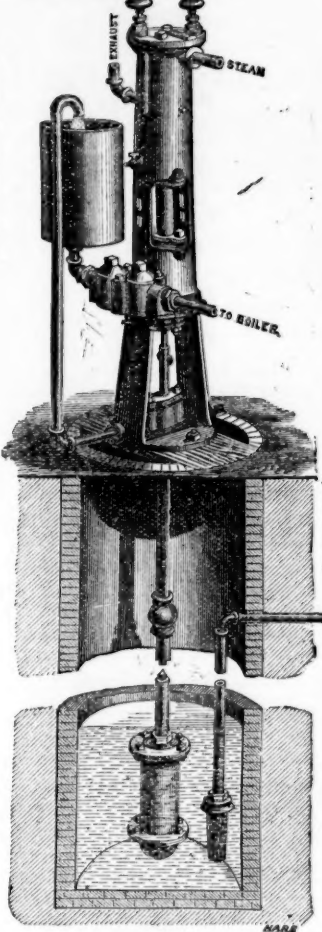
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